COURSE NOTES

FOR

Bachelor Computer Applications

First Semester

Computer Fundamental & Office Automation

as per syllabus of

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BCA-S101T Computer Fundamental & Office Automation

UNIT-I
Introduction to Computers
Introduction, Characteristics of Computers, Block diagram of computer.
Types of computers and features, Mini Computers, Micro Computers, Mainframe Computers,Super Computers. Types of Programming Languages (Machine Languages, Assembly Languages,High Level Languages). Data Organization, Drives, Files, Directories.Types of Memory (Primary And Secondary) RAM, ROM, PROM, EPROM,.Secondary Storage Devices (FD,CD, HD, Pen drive) I/O Devices (Scanners, Plotters, LCD, Plasma Display),Number Systems: Introduction to Binary, Octal, Hexadecimal system -Conversion, Simple Addition, Subtraction, Multiplication.

UNIT-II
Algorithm and Flowcharts
Algorithm: Definition, Characteristics, Advantages and disadvantages, Examples
Flowchart: Definition, Define symbols of flowchart, Advantages and disadvantages, Examples.

UNIT-III
Operating System and Services in O.S.
Dos – History, Files and Directories, Internal and External Commands, Batch Files, Types of O.S.

UNIT-IV
Windows Operating Environment
Features of MS – Windows, Control Panel, Taskbar, Desktop, Windows Application, Icons, Windows Accessories, Notepad, Paintbrush.

UNIT-V
Editors and Word Processors
Basic Concepts, Examples: MS-Word, Introduction to desktop publishing.

UNIT-VI
Spreadsheets and Database packages
Purpose, usage, command, MS-Excel, Creation of files in MS-Access, Switching between applications, MS- Power Point.

Introduction to Computers

What is a computer?

Definitions

A computer is a machine that manipulates data according to a list of instructions called a program.

A computer can also be defined as an electronic machine that accepts input (data), processes it and gives out results (information). A program in memory manages the processing. It can make use of data or information stored in memory and remember the results of the processing for later use, again in memory.

A computer is also a (fairly complicated) tool intended to assist the user in accomplishing information-based tasks ranging from locating and acquiring data/information to to processing it to presenting or transmitting it.

Basic characteristics about computer are:

1. **Speed:** - As you know computer can work very fast. It takes only few seconds for calculations that we take hours to complete. You will be surprised to know that computer can perform millions (1,000,000) of instructions and even more per second.

Therefore, we determine the speed of computer in terms of microsecond (10-6 part of a second) or nanosecond (10 to the power -9 part of a second). From this you can imagine how fast your computer performs work.

2. **Accuracy**: - The degree of accuracy of computer is very high and every calculation is performed with the same accuracy. The accuracy level is 7

determined on the basis of design of computer. The errors in computer are due to human and inaccurate data.

3. **Diligence**: - A computer is free from tiredness, lack of concentration, fatigue, etc. It can work for hours without creating any error. If millions of calculations are to be performed, a computer will perform every calculation with the same accuracy. Due to this capability it overpowers human being in routine type of work.

4. **Versatility**: - It means the capacity to perform completely different type of work. You may use your computer to prepare payroll slips. Next moment you may use it for inventory management or to prepare electric bills.

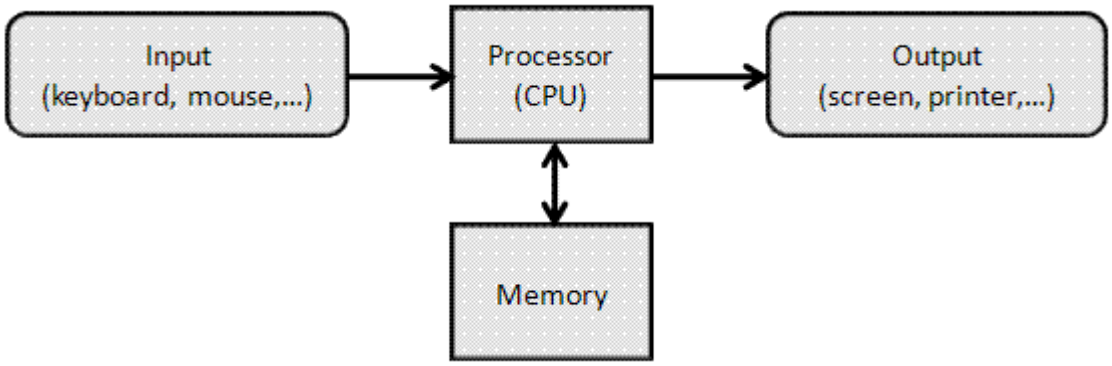
5. **Power of Remembering**: - Computer has the power of storing any amount of information or data. Any information can be stored and recalled as long as you require it, for any numbers of years. It depends entirely upon you how much data you want to store in a computer and when to lose or retrieve these data.

6. **No IQ**: - Computer is a dumb machine and it cannot do any work without instruction from the user. It performs the instructions at tremendous speed and with accuracy. It is you to decide what you want to do and in what sequence. So a computer cannot take its own decision as you can.

7. **No Feeling**: - It does not have feelings or emotion, taste, knowledge and experience. Thus it does not get tired even after long hours of work. It does not distinguish between users.

8. **Storage**: - The Computer has an in-built memory where it can store a large amount of data. You can also store data in secondary storage devices such as floppies, which can be kept outside your computer and can be carried to other computers.

Block Diagram of Computer



Types of Computers

Computer sizes and power

Computers can be generally classified by size and power as follows, though there is considerable overlap:

- Personal computer: A small, single-user computer based on a microprocessor.
- Workstation: A powerful, single-user computer. A workstation is like a personal computer, but it has a more powerful microprocessor and, in general, a higher-quality monitor.
- Minicomputer: A multi-user computer capable of supporting up to hundreds of users simultaneously.
- Mainframe: A powerful multi-user computer capable of supporting many hundreds or thousands of users simultaneously.
- Supercomputer: An extremely fast computer that can perform hundreds of millions of instructions per second.

Supercomputer and Mainframe

Supercomputer is a broad term for one of the fastest computers currently available. Supercomputers are very expensive and are employed for specialized applications that require immense amounts of mathematical calculations (number crunching). For example, weather forecasting requires a supercomputer. Other uses of supercomputers scientific simulations, (animated) graphics, fluid dynamic calculations, nuclear energy research, electronic design, and analysis of geological data (e.g. in

petrochemical prospecting). Perhaps the best known supercomputer manufacturer is Cray Research.

Mainframe was a term originally referring to the cabinet containing the central processor unit or "main frame" of a room-filling Stone Age batch machine. After the emergence of smaller "minicomputer" designs in the early 1970s, the traditional big iron machines were described as "mainframe computers" and eventually just as mainframes. Nowadays a Mainframe is a very large and expensive computer capable of supporting hundreds, or even thousands, of users simultaneously. The chief difference between a supercomputer and a mainframe is that a supercomputer channels all its power into executing a few programs as fast as possible, whereas a mainframe uses its power to execute many programs concurrently. In some ways, mainframes are more powerful than supercomputers because they support more simultaneous programs. But supercomputers can execute a single program faster than a mainframe. The distinction between small mainframes and minicomputers is vague, depending really on how the manufacturer wants to market its machines.

Minicomputer

It is a midsize computer. In the past decade, the distinction between large minicomputers and small mainframes has blurred, however, as has the distinction between small minicomputers and workstations. But in general, a minicomputer is a multiprocessing system capable of supporting from up to 200 users simultaneously.

Workstation

It is a type of computer used for engineering applications (CAD/CAM), desktop publishing, software development, and other types of applications that require a moderate amount of computing power and relatively high quality graphics capabilities. Workstations generally come with a large, high-resolution graphics screen, at large amount of RAM, built-in network

support, and a graphical user interface. Most workstations also have a mass storage device such as a disk drive, but a special type of workstation, called a diskless workstation, comes without a disk drive. The most common operating systems for workstations are UNIX and Windows NT. Like personal computers, most workstations are single-user computers. However, workstations are typically linked together to form a local-area network, although they can also be used as stand-alone systems.

N.B.: In networking, workstation refers to any computer connected to a local-area network. It could be a workstation or a personal computer.

Personal computer:

It can be defined as a small, relatively inexpensive computer designed for an individual user. In price, personal computers range anywhere from a few hundred pounds to over five thousand pounds. All are based on the microprocessor technology that enables manufacturers to put an entire CPU on one chip. Businesses use personal computers for word processing, accounting, desktop publishing, and for running spreadsheet and database management applications. At home, the most popular use for personal computers is for playing games and recently for surfing the Internet.

Personal computers first appeared in the late 1970s. One of the first and most popular personal computers was the Apple II, introduced in 1977 by Apple Computer. During the late 1970s and early 1980s, new models and competing operating systems seemed to appear daily. Then, in 1981, IBM entered the fray with its first personal computer, known as the IBM PC. The IBM PC quickly became the personal computer of choice, and most other personal computer manufacturers fell by the wayside. P.C. is short for personal computer or IBM PC. One of the few companies to survive IBM's onslaught was Apple Computer, which remains a major player in the personal computer marketplace. Other companies adjusted to IBM's dominance by building IBM clones, computers that were internally almost the same as the IBM PC, but that cost less. Because IBM clones used the same microprocessors as IBM PCs, they were capable of running the same software. Over the years, IBM has lost much of its influence in directing the

evolution of PCs. Therefore after the release of the first PC by IBM the term PC increasingly came to mean IBM or IBM-compatible personal computers, to the exclusion of other types of personal computers, such as Macintoshes. In recent years, the term PC has become more and more difficult to pin down. In general, though, it applies to any personal computer based on an Intel microprocessor, or on an Intel-compatible microprocessor. For nearly every other component, including the operating system, there are several options, all of which fall under the rubric of PC

Types of Programming Language

Low-level language

A **low-level language** is a programming language that provides little or no abstraction of programming concepts, and is very close to writing actual machine instructions. Two good examples of low-level languages are assembly and machine code

Assembly language

Sometimes referred to as **assembly** or **ASL**, **assembly language** is a low-level programming language used to interface with computer hardware. Assembly language uses structured commands as substitutions for numbers allowing humans to more easily read the code versus looking at binary. Although easier to read than binary, assembly language is a difficult language and is usually substituted for a higher language such as C. Below is an example of assembly language in a debug routine.

Machine language

Sometimes referred to as **machine code** or **object code**, **machine language** is a collection of binary digits or bits that the computer reads and interprets. Machine language is the only language a computer is capable of understanding.

Computer programs are written in one or more programming languages, like C++, Java, or Visual Basic. A computer cannot directly understand the programming languages used to create computer programs, so the program code must be compiled. Once a program's code is compiled, the computer can understand it because the program's code has been turned into machine language.

High-level language

Sometimes abbreviated as **HLL**, a **high-level language** is a computer programming language that isn't limited by the computer, designed for a specific job, and is easier to understand. It is more like human language and less like machine language. However, for a computer to understand and run a program created with a high-level language, it must be compiled into machine language.

The first high-level languages were introduced in the 1950's. Today, there are many high-level languages in use, including BASIC, C, C++, Cobol, FORTRAN, Java, Pascal, Perl, PHP, Python, Ruby, and Visual Basic.

Memory

A memory is just like a human brain. It is used to store data and instructions. Computer memory is the storage space in computer where data is to be processed and instructions required for processing are stored. The memory is divided into large number of small parts called cells. Each location or cell has a unique address which varies from zero to memory size minus one. For example if computer has 64k words, then this memory unit has 64 * 1024=65536 memory locations. The address of these locations varies from 0 to 65535.

Memory is primarily of three types

- Cache Memory
- Primary Memory/Main Memory
- Secondary Memory

Cache Memory

Cache memory is a very high speed semiconductor memory which can speed up CPU. It acts as a buffer between the CPU and main memory. It is used to hold those parts of data and program which are most frequently used by CPU. The parts of data and programs are transferred from disk to cache memory by operating system, from where CPU can access them.

Advantages

The advantages of cache memory are as follows:

- Cache memory is faster than main memory.
- It consumes less access time as compared to main memory.
- It stores the program that can be executed within a short period of time.
- It stores data for temporary use.

Disadvantages

The disadvantages of cache memory are as follows:

- Cache memory has limited capacity.
- It is very expensive.

Primary Memory (Main Memory)

Primary memory holds only those data and instructions on which computer is currently working. It has limited capacity and data is lost when power is switched off. It is generally made up of semiconductor device. These memories are not as fast as registers. The data and instruction required to be processed reside in main memory. It is divided into two subcategories RAM and ROM.

RAM or Primary Memory

RAM stands for **Random Access Memory**. It is the primary storage for the computer. All programs, including the operating system, and any data they are using must be in RAM for the computer to access them. Whenever I hear the term, I think, "DAM, why'd they call it RAM?" It is called *random* because the computer can *directly* access *any* location in RAM (using its memory "address"), though we rarely have call to access memory randomly. Thus, **D**irect **A**ccess **M**emory would have been a better name.

By comparison, a tape (video or audio) is a *sequential* medium. Accessing a particular note in a song is virtually impossible and requires scanning forward to find it. An audio editing program working on a song in RAM can and does directly access any point you want in the song. (Specifying it might be a problem, but consider cutting a section out to use as a ring tone.

Once you specify the end points, the program goes directly to the indicated beginning and end.)

RAM is volatile, or temporary, storage. When the computer is booted, the operating system is loaded into RAM. Any applications you use are located in RAM, along with the data the application may use. A loss of power means that everything in RAM is lost. Data that you did not save (any changes you have made recently) are lost. To help protect you from this loss many applications automatically save a working copy to the (permanent) storage on the hard disk at regular intervals. (You can then recover *most* of your work.)

Secondary Memory

This type of memory is also known as external memory or non-volatile. It is slower than main memory. These are used for storing data/Information permanently. CPU directly does not access these memories instead they are accessed via input-output routines. Contents of secondary memories are first transferred to main memory, and then CPU can access it. For example : disk, CD-ROM, DVD etc.

Characteristic of Secondary Memory

- These are magnetic and optical memories
- It is known as backup memory.
- It is non-volatile memory.
- Data is permanently stored even if power is switched off.
- It is used for storage of data in a computer.

- Computer may run without secondary memory.
- Slower than primary memories

Peripheral and I/O Hardware

Input [

Since the computer is a digital device, all input devices must provide data in digital form. A key function of most of the devices listed below is to convert data from analog to digital form for transmission to the computer through a hardware interface (for our purposes, a *port*).

Keyboard

The *keyboard* is the most popular input device for a computer. It translates numbers, letters, symbols and control keys into digital data (bytes) that can be interpreted by the PC. Most English keyboards today are based on the **QWERTY**design, a de facto standard. It takes its name from the first six letters seen in the keyboard's top first row of letters.

Mouse/Pointing Device
A *mouse* is an input device that allows the user to point (locate) and click (select) . With the rise in graphical user interfaces, mice became the most commonly used method in controlling a computer. A *mouse* is used to manipulate objects and text on the computer screen. This device can be plugged in or can be cordless.

Ball mouse

The *ball mouse* utilizes a small rubber ball inside to transmit a spatial relationship between objects on the screen. The mechanical movement is done by 2 scroll bars that detects X and Y axis movement of the ball to allow it go glide on the desktop plane. The ball mouse was invented by Bill

English in 1972.

Since it contained moving parts, the ball mouse was prone to dirt build up inside. Hairs would often get caught and rolled into the ball mechanism, causing the mouse to function erratically. With the falling cost of technology, ball mice have now been mostly replaced with lighter optical mice.

Trackball

By essentially flipping the mechanical ball mouse "upside down", we get a*trackball*. The ball is directly manipulated to move the screen pointer.

These are great for mobile applications and public computer kiosks.

Optical

The *optical mouse* uses a light-emitting diode and photodiodes to detect movement relative to the underlying surface, rather than moving some of its parts like the traditional ball mouse. In order to increase the precision of the mouse, multiple infrared lasers with increasing resolution are used.

Stylus

A *stylus* is a small pen-like device used to enter data by reacting to a touch-sensitive screen or film. Styli allow a user to input handwriting specific pieces of information like signatures. Many artists also use a stylus combined with a tablet.

One important feature of a stylus is its tip which ideally is made of a firm, non-scratching form of plastic. The body of a stylus can be made from any

suitable material.

Styli are used with many popular devices like Palm Pilots and Trios, Blackberries and Nintendo DSs. Their popularity has reached a point where some companies offer conversion kits to change high-end or ergonomic writing pens into a stylus.

Like the mouse, light pen, and digitizer, a stylus is typically more accurate than using a finger as a pointing device.

Light Pen

A *light pen* is a computer input device, with a light sensitive wand that works with CRT monitors. Used like a touch screen, but with higher resolution. They were used in engineering, graphic design and illustrating, but light pens have generally been replaced by other technologies.

At right is a photo of the Hypertext Editing System (HES) console in use at Brown University, circa October 1969.

Digitizer

A *digitizer* is a pointing technology implemented on computer tablets. It consists of the *tablet*, an electronically integrated surface representative (to the computer) of an XY-axis grid. Using the electronic stylus (pen), the tablet will detect the stylus' movements and convert it into digital signals for the computer to use. A digitizing tablet is commonly used in the engineering and architectural industries as well as for fine and commercial art.

Microphone

A microphone converts sound to an electrical signal that is digitized and sent to the computer.

Microphones on laptops and smartphones typically appear as no more than a pin hole on the device.

Images

Cameras

Digital cameras are now standard, with most people uploading the pictures to their computer for processing, printing or sharing. Digital cameras are built into most laptops and hand-held devices, especially mobile phones. They are commonly added onto computers as webcams.

Video cameras are not yet all digital, although videos created using laptops and smartphones are digital. Older videos need to be converted (using a CODEC) for storage or manipulation on the computer.

Scanner

A *scanner* is a device that uses light to read an image or text and turn it into digital information. This media can then be used to store, change and send the image or text. There are various types of scanners. The three most common are drum, flatbed and hand. *Drum scanners* mechanically move the document to be scanned past the sensor. *Flatbed scanners* use a glass pane on which a document is placed while the sensor moves underneath – generally the most accurate method. *Hand-held scanners* are dragged across the the image manually.

Specialized & Commercial

Bar-Code

A (linear) *barcode* is a series of stripes that vary in thickness. These stripes represent numbers, which a computer reads as data. Bar codes are printed on products that are sold in retail, as well as postal service packages, rental videos etc. Bar Codes are still in common use today. With the introduction of WiFienabled smartphones with cameras, barcodes can be scanned on products and matched to an online database which allows price comparisons between various retail stores without having to visit each one. Another use of this combination is finding the nutritional content of a consumable product by scanning its barcode.

Other barcodes are two dimensional, as show at right. There are a number of barcode standards. QR codes or Quick Response codes are an example of two dimensional bar codes.

Sidebar: joke using QR code

RFID [src]

Radio-Frequency IDentification (*RFID*) is a technology that uses radio waves to transfer data between a reader and an electronic tag attached to an object, for the purpose of identification and tracking.

Over the forty years leading up to the turn of the 21st century, barcode technology brought inconspicuous, yet remarkable, changes to various industries and has had an impact on our lives. RFID, especially if its uses continue to multiply, will have an even greater impact.

RFID makes it possible to give each product (in a store) its own unique identifying number – like the license plate on a car but for every item in the world. This is a vast improvement over paper and pencil tracking or bar code tracking that has been used since the 1970s. With bar codes, it is only possible to identify the brand and type of package in a grocery store, for

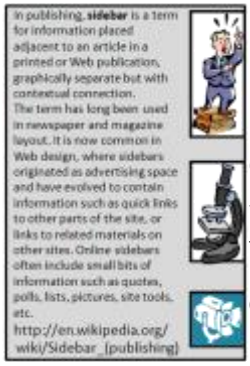
instance. Furthermore, *passive RFID tags*, those without a battery, can be read if passed near to (up to ten meters or 33 feet) an RFID reader. It is not necessary to "show" the tag to the reader device, as with a bar code. In other words it does not require line of sight to "see" an RFID tag, the tag can be read inside a case, carton, box or other container, and unlike barcodes RFID tags can be read hundreds at a time. Bar codes can only be read one at a time.

Active RFID tags, those with a battery, can be read from as much as 100 meters (330 feet) away and beyond the line of sight of the reader. The application of bulk reading enables an almost parallel reading of tags.

Radio-frequency identification involves the hardware known as interrogators (also known as readers), and tags (also known as labels), as well as RFID software or RFID middleware.

Most RFID tags contain at least two parts: one is an integrated circuit for storing and processing information, modulating and demodulating a radio-frequency (RF) signal, and other specialized functions; the other is an antenna for receiving and transmitting the signal.

RFID can be either passive (using no battery), active (with an on-board battery that always broadcasts or beacons its signal) or *battery assisted passive* (BAP) which has a small battery on board that is activated when in the presence of an RFID reader. Passive tags in 2011 start at $0.05 each.



"Wal-Mart Stores Inc. plans to roll out sophisticated electronic ID tags to track individual pairs of jeans and underwear, the first step in a system that advocates say better controls inventory but some critics say raises privacy concerns."[Wall Street Journal]

Speech Recognition

Sounds (phonemes) are the basis of words. The computer can identify the sounds and match them with potential words. Word with the same phonemes (their and there) can be selected by the words around them using grammar.

Portable Devices

The current generation of portable devices, such as laptops and smartphones, include many of the devices described above, including keyboard, cursor control, touch screen (as described below), digital camera, and microphone. "Scanning" a barcode involves snapping a digital picture. The network (phone and Internet) can both act as an input device, as well as an output device.

Touchpad/Pointing Stick

Touch pads are most commonly built into a laptop computer. A touch pad is a rectangular plastic piece which can control the pointer on a computer simply by dragging your finger across its surface. A pointing stick resembles a pencil eraser and is commonly located in between keys on a laptop key board. To control the pointer on the computer with a pointing stick you use your finger to push the stick in the direction you would like the pointer to move.

Touchpads were originally known as trackpads. Some touchpads can have multiple mouse buttons by either tapping in a special corner of the pad, or by tapping with two or more fingers. Scrolling is implemented in touchpads along the sides, although this can be configured in touchpad settings. Some touchpads respond to multitouch, like the touchpads found on MacBooks.

Both the touchpad and the point stick allow one to move the cursor about with minimal hand/arm movement, though some users find accuracy to be a problem (more so with the pointing stick). By contrast, the mouse often requires large movements, but excels at accuracy.

Touch Screen

A touch screen allows the user's finger(s) to act as a point & click device, providing the user interface with a more direct manipulation of objects and text displayed on the screen. That is, it gains most of the advantages of the light pen or stylus, without the need for a separate device. Accuracy is one problem, especially for small hand-held device where the (relatively large and blunt) finger occludes a significant part of the screen. Touch screens are commonly used on hand-held devices, kiosk computers, ATMs, and public workstations, like self check out (point of sale) devices in a store.

There are two common types of touch screen, resistive screens and capacitive screens. *Resistive screens* operate by using two thin layers. When one layer comes into contact with another (from someone pressing the screen), they form a connection which can be translated into a pair of coordinates a computer uses. Resistive screens have the advantage of allowing the use of a (normal) stylus or a hand wearing a glove. They are used in many hand-held devices.

Capacitive screens utilizes the concept that the human body is a conductor. When someone taps on a resisting material (such as a glass panel), a change in capacitance is observed, and the computer can determine where the user made a selection. This type of technology is known as capacitive sensing. Capacitive screens may only be used with styli and gloves when they are specially designed. A popular use of capacitive sensing is the touch screens in popular smartphones such as the iPhone.

Network Interface
A network interface allows the computer to input data to your computer.

Output

Monitor

A monitor, or visual display unit, is an electronic visual display for computers. It is now common for a single computer to have multiple monitors. Currently, most monitors are backlit LCD (flat panel liquid crystal) displays, which use much less energy than the older CRT (Cathode Ray Tube) displays. CRTs aim a stream of electrons through a mask at a phospher coated, fluorescent screen creating a bright, sharp image, and much more electromagnetic radiation and heat.

The image is created from approximately one million (1000x1000) pixels, or*picture elements*. Each pixel includes subpixels for the primary colors (red, green & blue) which are mixed to create a color on the screen. You will recall that a true color display provides approximatley 16 million colors (using one byte each for the red, green & blue subpixels).

LCD monitor. Note profile and greatly improved viewing angle
By Silmar2008 (Own work) [CC-BY-3.0], via Wikimedia Commons

CRT monitor. Note profile
By Ceedrun (Own work) [GFDL or CC-BY-SA-3.0-2.5-2.0-1.0], via Wikimedia Commons

Monitor performance characteristics

The performance of a monitor is measured by the following parameters:

- **Luminance**, or over-all brightness, is measured in candelas per square meter (cd/m2 also called a Nit).
- **Aspect ratios** is the ratio of the horizontal length to the vertical length. Monitors usually have the aspect ratio 4:3, 16:10 or 16:9.
- **Viewable image size** is usually measured diagonally, but the actual widths and heights are more informative since they are not affected by the aspect ratio in the same way. For CRTs, the viewable size is typically 1 in (25 mm) smaller than the tube itself.
- **Display resolution** is the number of distinct pixels in each dimension that can be displayed. Maximum resolution is limited by *dot pitch*.
- **Dot pitch** is the distance between subpixels of the same color in millimeters. In general, the smaller the dot pitch, the sharper the picture will appear.
- **Refresh rate** is the number of times in a second that a display is illuminated. Maximum refresh rate is limited by *response time*.
- **Response time** is the time a pixel in a monitor takes to go from active (black) to inactive (white) and back to active (black) again, measured in milliseconds. Lower numbers mean faster transitions and therefore fewer visible image artifacts.
- **Contrast ratio** is the ratio of the luminosity of the brightest color (white) to that of the darkest color (black) that the monitor is capable of producing.
- **Power consumption** is the amount of energy needed (measured in Watts).
- **Viewing angle** is the maximum angle at which images on the monitor can be viewed, without excessive degradation to the image. It is measured in degrees horizontally and vertically.

Electronic Paper [src]

Electronic paper, e-paper and electronic ink are a range of display technologies which are designed to mimic the appearance of ordinary ink on paper. Unlike conventional backlit flat panel displays, electronic paper displays *reflect* light like ordinary paper. Many of the technologies can hold text and images indefinitely without using electricity, while allowing images to be changed later. Flexible electronic paper uses plastic substrates and plastic electronics for the display backplane.

Electronic paper is often considered to be more comfortable to read than conventional displays. This is due to the stable image, which has no need to be refreshed constantly, a wider viewing angle, and that it reflects ambient light rather than emitting its own light. An ideal e-paper display can be read in direct sunlight without the image appearing to fade. The contrast ratio in available displays as of 2008 might be described as similar to that of newspaper, though newly-developed displays are slightly better. There is ongoing competition among manufacturers to provide full-color ability.

Printing Technology [src]

Printers are routinely classified by the printer technology they employ; numerous such technologies have been developed over the years. The choice of engine has a substantial effect on what jobs a printer is suitable for, as different technologies are capable of different levels of image or text quality, print speed, cost, and noise. In addition, some printer technologies are inappropriate for certain types of physical media, such as carbon paper or transparencies.

A second aspect of printer technology that is often forgotten is resistance to alteration: liquid ink, such as from an inkjet head or fabric ribbon, becomes absorbed by the paper fibers, so documents printed with liquid ink are more difficult to alter than documents printed with toner or solid inks, which do not penetrate below the paper surface. (This is important in many financial and business applications.)

Toner-based printers

A *laser printer* rapidly produces high quality text and graphics. As with digital photocopiers and multifunction (print, copy, fax) printers, laser printers employ axerographic printing process but differ from analog photocopiers in that the image is produced by the direct scanning of a laser beam across the printer's photoreceptor.

Another toner-based printer is the LED printer which uses an array of LEDs instead of a laser to cause toner adhesion to the print drum.

Liquid inkjet printers

Inkjet printers operate by propelling variably-sized droplets of liquid or molten material (ink) onto almost any sized page. They are the most common type of computer printer used by consumers.

Solid ink printers

Solid ink printers are a type of thermal transfer printer. Rather than mixing

red, green and blue, they use solid sticks of CMYK-colored ink, similar in consistency to candle wax, which are melted and fed into a piezo crystal operated print-head. The printhead sprays the ink on a rotating, oil coated drum. The paper then passes over the print drum, at which time the image is transferred, or transfixed, to the page. Solid ink printers are most commonly used as color office printers, and are excellent at printing on transparencies and other non-porous media. Solid ink printers can produce excellent results. Acquisition and operating costs are similar to laser printers. Drawbacks of the technology include high energy consumption and long warm-up times from a cold state. Also, some users complain that the resulting prints are difficult to write on, as the wax tends to repel inks from pens, and are difficult to feed through automatic document feeders, but these traits have been significantly reduced in later models. In addition, this type of printer is only available from one manufacturer, Xerox.

Dye-sublimation printer

A *dye-sublimation printer* is a printer which employs a printing process that uses heat to transfer dye to a medium such as a plastic card, paper or canvas. The process is usually to lay one color at a time using a ribbon that has color panels. Dye-sublimation printers are intended primarily for high-quality color applications, including color photography; and are less well-suited for text. While once the province of high-end print shops, dye-sublimation printers are now increasingly used as dedicated consumer photo printers.

Inkless printers

Thermal printer

Thermal printers work by selectively heating regions of special heat-sensitive paper. Monochrome thermal printers are used in point of sale devices, such as, cash registers, ATMs, and gasoline dispensers. Colors can be achieved with special papers and different temperatures and heating rates for different colors; these colored sheets are not required in black-and-white output.

Plotter

The **plotter** is a computer printer for printing vector graphics. In the past, plotters were used in applications such as computer-aided design, though they have generally been replaced with wide-format conventional printers. A plotter gives a hard copy of the output. It draws pictures on a paper using a pen. Plotters are used to print designs of ships and machines, plans for buildings and so on.

Number System

When we type some letters or words, the computer translates them in numbers as computers can understand only numbers. A computer can understand positional number system where there are only a few symbols called digits and these symbols represent different values depending on the position they occupy in the number.

A value of each digit in a number can be determined using

- The digit
- The position of the digit in the number
- The base of the number system (where base is defined as the total number of digits available in the number system).

Decimal Number System

The number system that we use in our day-to-day life is the decimal number system. Decimal number system has base 10 as it uses 10 digits from 0 to 9. In decimal number system, the successive positions to the left of the decimal point represent units, tens, hundreds, thousands and so on.

Each position represents a specific power of the base (10). For example, the decimal number 1234 consists of the digit 4 in the units position, 3 in the tens position, 2 in the hundreds position, and 1 in the thousands position, and its value can be written as

```
(1x1000)+ (2x100)+ (3x10)+ (4xl)
```

$(1x10^3)+ (2x10^2)+ (3x10^1)+ (4xl0^0)$

1000 + 200 + 30 + 4

1234

As a computer programmer or an IT professional, you should understand the following number systems which are frequently used in computers.

S.N.	Number System and Description
1	**Binary Number System** Base 2. Digits used : 0, 1
2	**Octal Number System** Base 8. Digits used : 0 to 7
3	**Hexa Decimal Number System** Base 16. Digits used : 0 to 9, Letters used : A- F

Binary Number System

Characteristics of binary number system are as follows:

- Uses two digits, 0 and 1.
- Also called base 2 number system
- Each position in a binary number represents a 0 power of the base (2). Example 2^0
- Last position in a binary number represents a x power of the base (2). Example 2^x where x represents the last position - 1.

Example

Binary Number : 10101_2

Calculating Decimal Equivalent:

Step	Binary Number	Decimal Number
Step 1	10101_2	$((1 \times 2^4) + (0 \times 2^3) + (1 \times 2^2) + (0 \times 2^1) + (1 \times 2^0))_{10}$
Step 2	10101_2	$(16 + 0 + 4 + 0 + 1)_{10}$
Step 3	10101_2	21_{10}

Note : 10101_2 is normally written as 10101.

Octal Number System

Characteristics of octal number system are as follows:

- Uses eight digits, 0,1,2,3,4,5,6,7.
- Also called base 8 number system
- Each position in an octal number represents a 0 power of the base (8). Example 8^0
- Last position in an octal number represents a x power of the base (8). Example 8^x where x represents the last position - 1.

Example

Octal Number : 12570_8

Calculating Decimal Equivalent:

Step	Octal Number	Decimal Number
Step 1	12570_8	$((1 \times 8^4) + (2 \times 8^3) + (5 \times 8^2) + (7 \times 8^1) + (0 \times 8^0))_{10}$
Step 2	12570_8	$(4096 + 1024 + 320 + 56 + 0)_{10}$
Step 3	12570_8	5496_{10}

Note : 12570_8 is normally written as 12570.

Hexadecimal Number System

Characteristics of hexadecimal number system are as follows:

- Uses 10 digits and 6 letters, 0,1,2,3,4,5,6,7,8,9,A,B,C,D,E,F.
- Letters represents numbers starting from 10. A = 10. B = 11, C = 12, D = 13, E = 14, F = 15.
- Also called base 16 number system
- Each position in a hexadecimal number represents a 0 power of the base (16). Example 16^0
- Last position in a hexadecimal number represents a x power of the base (16). Example 16^x where x represents the last position - 1.

Example

Hexadecimal Number : $19FDE_{16}$

Calculating Decimal Equivalent:

Step	Binary Number	Decimal Number
Step 1	$19FDE_{16}$	$((1 \times 16^4) + (9 \times 16^3) + (F \times 16^2) + (D \times 16^1) + (E \times 16^0))_{10}$
Step 2	$19FDE_{16}$	$((1 \times 16^4) + (9 \times 16^3) + (15 \times 16^2) + (13 \times 16^1) + (14 \times 16^0))_{10}$
Step 3	$19FDE_{16}$	$(65536 + 36864 + 3840 + 208 + 14)_{10}$
Step 4	$19FDE_{16}$	106462_{10}

Algorithm and Flowcharts

ALGORITHM:

DEFINITION:- An **algorithm** is a well-ordered collection of unambiguous and effectively computable operations that when executed produces a result and halts in a finite amount of time.

Characteristics of Algorithms:

we can identify five important characteristics of algorithms.

1. Algorithms are well-ordered.
2. Algorithms have unambiguous operations.
3. Algorithms have effectively computable operations.
4. Algorithms produce a result.
5. Algorithms halt in a finite amount of time.

These characteristics need a little more explanation, so we will look at each one in detail.

Algorithms are well-ordered

Since an algorithm is a collection of operations or instructions, we must know the correct order in which to execute the instructions. If the order is unclear, we may perform the wrong instruction or we may be uncertain which instruction should be performed next. This characteristic is especially important for computers. A computer can only execute an algorithm if it knows the exact order of steps to perform.

Algorithms have unambiguous operations

Each operation in an algorithm must be sufficiently clear so that it does not need to be simplified. Given a list of numbers, you can easily order them from largest to smallest with the simple instruction "Sort these numbers." A computer, however, needs more detail to sort numbers. It must be told to search for the smallest number, how to find the smallest number, how to compare numbers together, etc. The operation "Sort these numbers" is ambiguous to a computer because the computer has no basic operations for sorting. Basic operations used for writing algorithms are known as primitive operations or primitives. When an algorithm is written in computer primitives, then the algorithm is unambiguous and the computer can execute it.

Algorithms have effectively computable operations

Each operation in an algorithm must be doable, that is, the operation must be something that is possible to do. Suppose you were given an algorithm for planting a garden where the first step instructed you to remove all large stones from the soil. This instruction may not be doable if there is a four ton rock buried just below ground level. For computers, many mathematical operations such as division by zero or finding the square root of a negative number are also impossible. These operations are not effectively computable so they cannot be used in writing algorithms.

Algorithms produce a result

In our simple definition of an algorithm, we stated that an algorithm is a set of instructions for solving a problem. Unless an algorithm produces some result, we can never be certain whether our solution is correct. Have you ever given a command to a computer and discovered that nothing changed? What was your response? You probably thought that the computer was malfunctioning because your command did not produce any type of result. Without some visible change, you have no way of determining the effect of your command. The same is true with algorithms. Only algorithms which produce results can be verified as either right or wrong.

Algorithms halt in a finite amount of time

Algorithms should be composed of a finite number of operations and they should complete their execution in a finite amount of time. Suppose we wanted to write an algorithm to print all the integers greater than 1. Our steps might look something like this:

1. Print the number 2.
2. Print the number 3.
3. Print the number 4.

.
.
.

While our algorithm seems to be pretty clear, we have two problems. First, the algorithm must have an infinite number of steps because there are an infinite number of integers greater than one. Second, the algorithm will run forever trying to count to infinity. These problems violate our definition that an algorithm must halt in a finite amount of time. Every algorithm must reach some operation that tells it to stop.

ADVANTAGE OF ALGORITHM:

- it is a step-by-step rep. of a solution to a given prblem ,which is very easy to understand
- it has got a definite procedure.

- it easy to first develope an algorithm,&then convert it into a flowchart &then into a computer program.
- it is independent of programming language.
- it is easy to debug as every step is got its own logical sequence.

DISADVANTAGE OF ALGORITHM:

it is time consuming & cubersome as an algorithm is developed first which is converted into flowchart &then into a

computer program.

ALGORITHM EXAMPLE:

algorithm to find out number is odd or even

step 1 : start

step 2 : input number

step 3 : rem=number mod 2

step 4 : if rem=0 then

print "number even"

else

print "number odd"

endif

step 5 : stop

FLOWCHART:

DEFINITION:

A flowchart is a graphic representation of how a process works, showing, at a minimum, the sequence of steps.

The **flowchart** is a means to visually present the flow of data through an **information processing systems**, the operations performed within the system and the sequence in which they are performed. In this lesson, we shall concern ourselves with the program flowchart, which describes what operations (and in what sequence) are required to solve a given problem. The program flowchart can be likened to the blueprint of a building. As we know, a designer draws a blueprint before starting to construct a building. Similarly, a programmer prefers to draw a flowchart prior to writing a computer program. As in the case of the drawing of a blueprint, the flowchart is drawn according to defined rules and using standard flowchart symbols prescribed by the American National Standard Institute, Inc.

Meaning of a Flow Chart

A flowchart is a diagrammatic representation that illustrates the sequence of operations to be performed to get the solution of a problem. Flowcharts are generally drawn in the early stages of formulating computer solutions. Flowcharts facilitate communication between programmers and business people. These flowcharts play a vital role in the programming of a problem and are quite helpful in understanding the logic of complicated and lengthy problems. Once the flowchart is drawn, it becomes easy to write the program in any high level language. Often we see how flowcharts are helpful in explaining the program to others. Hence, it is correct to say that a flowchart is a must for the better documentation of a complex program.

Flow is a representation of a series of logic operations to satisfy specific requirements. A flow exists naturally. It can be irregular, unfixed or full of problems. For this reason, it may apparently be absent in some situations. Lately, members of a team were assigned to investigate the flow of a business process, and I was told that there were some deficiencies in the flow. The reply from the person who was in charge of the team was that no flow was shown in part of the business process. As a matter of fact, it is impossible for a business carried out without a flow. It may be a flow in an unfixed form, or, may be the person himself whom you investigated does not have a clear sense about the flow.

Chart, or diagram, is a presentation or a written description of some regular and common parts of the flow. A chart is conducive to communication and concentration and offers references for process reengineering.

Flow chart can be seen from the definition that a flow accompanies always with business or transaction. Not all of the flows, however, are appropriate to be expressed by flowcharts. Flows that can be expressed by charts follow some fixed routines, and the key links of flows won't be changed constantly.

Symbols of Flowchart :

Figure: Start/Stop terminal box

Figure: Input/Output box

Figure: Process/Instruction box

Figure: Lines or Arrows

Figure: Decision box

Figure: Connector box

Figure: Comment box

Figure: Preparation box

Figure: Separate box

Advantages and Disadvantages of Flowchart

Advantages Of Using FLOWCHARTS:

- Communication: Flowcharts are better way of communicating the logic of a system to

all concerned or involved.
• Effective analysis: With the help of flowchart, problem can be analysed in more effective way therefore reducing cost and wastage of time.
• Proper documentation: Program flowcharts serve as a good program documentation, which is needed for various purposes, making things more efficient.
• Efficient Coding: The flowcharts act as a guide or blueprint during the systems analysis and program development phase.
• Proper Debugging: The flowchart helps in debugging process.
• Efficient Program Maintenance: The maintenance of operating program becomes easy with the help of flowchart. It helps the programmer to put efforts more efficiently on that part

Disadvantages Of Using FLOWCHARTS:
• Complex logic: Sometimes, the program logic is quite complicated. In that case, flowchart becomes complex and clumsy. This will become a pain for the user, resulting in a waste of time and money trying to correct the problem
• Alterations and Modifications: If alterations are required the flowchart may require re-drawing completely. This will usually waste valuable time.
• Reproduction: As the flowchart symbols cannot be typed, reproduction of flowchart becomes a problem.

EXAMPLE OF FLOW CHART:

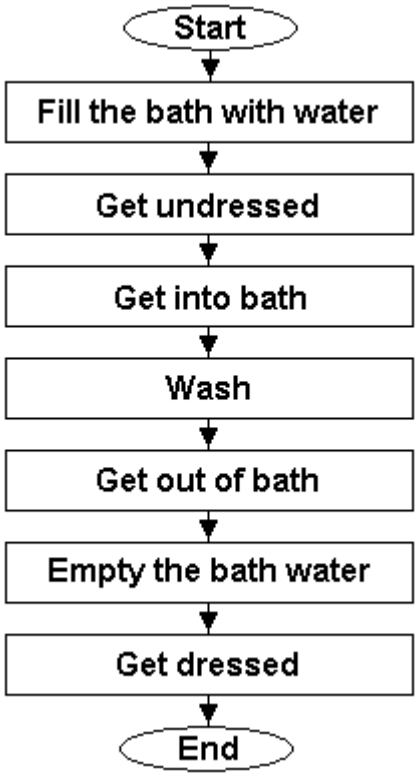
Flow Chart Example 1

We will now draw a flow chart for having a bath.

We start by thinking about the steps involved:
(1) Fill the bath with water
(2) Get undressed.
(3) Get into bath.
(4) Wash.
(5) Get out of bath.
(6) Empty the bath water.
(7) Get dressed.

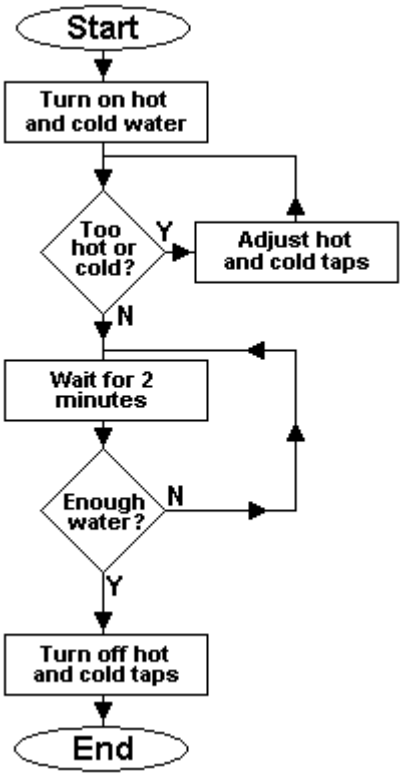
Now we need to draw the chart with instruction boxes.
There are no decisions on this chart - the steps all follow
on from one another. Remember the **Start** and **End** boxes.

The final chart is shown on the right. Of course some people might do some of these steps in a different order,
but hopefully they get undressed before getting in the bath!



Flow Chart Example 2

The step *Fill the bath with water* in the previous example could have been more detailed. For example, you need to check if there is enough water and whether it is at the right temperature while running the bath.



Again we need to think about the steps involved:
(1) Turn on the hot and cold taps.
(2) Is it too hot or cold? If it is, go to step 3, otherwise go to step 4.
(3) Adjust the hot and cold taps and go back to step 2.
(4) Wait for 2 minutes.
(5) Is the bath full? If it is, go to step 7, otherwise go to step 6.
(6) Go back to step 4.
(7) Turn off the hot and cold taps.

Now we need to draw the chart. This time we need to use decision boxes for steps 2 (where the temperature of the water is checked) and 5 (where it is checked if the bath is full).

The final chart is shown on the right.

DOS

MS-DOS (pronounced "em ess doss") stands for Microsoft disk operating system, the most widely-used *operating system* for *IBM PC* and *compatible* computers (an *operating system* is the master control software program that runs the computer itself). This means that MS-DOS is the most widely used computer operating system, period, since there are something like 80 to 100 million PCs in the world, and most of them use MS-DOS. There are at least two other versions of DOS that are compatible with MS-DOS (meaning they work the same way and run the same programs). So please see the definition for *DOS* for the whole story.

The history of MS-DOS is a fascinating study in how business success often depends more on good timing, a nose for a good deal, and aggressive marketing, than on the technical merits of your product. When IBM first developed the IBM PC, it wanted to license a crude operating system called CP/M, which was the dominant one for personal computers at the time (ever hear of a Kaypro or an Osborne?) Apparently IBM'S offer was too low for the makers of CP/M, so IBM went shopping at Microsoft. Microsoft didn't have a suitable product at the time, but the boss, Bill Gates could smell money. He bought out a little company that was making an imitation version of CP/M, and rushed out a revision that worked on IBM'S machine. When the IBM PC caught on, Bill got really rich-even though MS-DOS is really not so hot.

Guy Kawasaki says that MS-DOS stands for Microsoft Seeks Domination of Society.

WHAT IS DOS?

Dos is a disk operating system with a set of programs that act as a translator between the user

and the computer in order to perform the task of the user. Ms-Dos is a popular operating system

on Micro-Computers.

Dos commands are of two types:

Internal Commands:

Cls : This command is used to clear the screen.

Ver : This helps us to know the later version of dos.

Vol : This command shows the label of the current drive & and its serial number.

Date : This command display the current date. Also called as the system date.

Time : This command display the current time and also the message to enter the new time.

Dir : This command display the list of files and directory in the mentioned directory or drive.

Dir/P : This command show all the files pagewise. Once the screen is full of filename a message saying "press any key to continue" is displayed, he user can take his/ her own time o view the files & its details.

Dir/w : This command is used to display the content of disk i.e files width wise i.e:- five filenames perline.

Wild Characters : There are 2 wild characters.

?: denoted any one single characters.

*** :** denotes any no of characters.

Type : This command is used to see the content of a specific file on the screen.

Rename or Ren : This command is used to change the filename.

Del (Deleting) : This command is used to erase the file from the disk.

Copy : This commands is used to duplicate the content of one file in to another file.

Directories : A directories is a separate area on the disk to store some files.

Md<directory name>

Rd<removing directory>

Edit : is a Dos Editor. It is an internal command.

External Commands :

External commands are ones which requires certain special Dos files for their execution.

Tree : This command display path and optionally list the content of each directory and sub directory

on the specified drive.

Sort : The sort filter reads input ,sorts the data and then writes the sorted data screen or to a file

or another device.

Find : Locates all the lines which contain a specific string of text in a file or files.

Print : This command used to print to content of the files.

Chkdsk: This command is used to display the report regarding the status of the disk.

Diskcopy: This command is used to copy the content of one disk to another.

Attrib : Each and every file has some attributes stored for it.

Backup: The hardisk can sometimes suffer a head crash. In such occasion all data on the disk is

lost and irrecoverable.

Format : To make a floppy or hardisk capable of storage.

Deltree: It is used to delete all files or directories from the drive or directory from drive or directory.

Types of Operating Systems

Following are some of the most widely used types of Operating system.

1. Simple Batch System
2. Multiprogramming Batch System
3. Multiprocessor System
4. Distributed Operating System
5. Realtime Operating System

SIMPLE BATCH SYSTEMS

In this type of system, there is no direct interaction between user and the computer.
The user has to submit a job (written on cards or tape) to a computer operator.
Then computer operator places a batch of several jobs on an input device.
Jobs are batched together by type of languages and requirement.
Then a special program, the monitor, manages the execution of each program in the batch.
The monitor is always in the main memory and available for execution.

Following are some disadvantages of this type of system :

1. Zero interaction between user and computer.
2. No mechanism to prioritize processes.

MULTIPROGRAMMING BATCH SYSTEMS

In this the operating system, picks and begins to execute one job from memory.
Once this job needs an I/O operation operating system switches to another job (CPU and OS always busy).
Jobs in the memory are always less than the number of jobs on disk(Job Pool).
If several jobs are ready to run at the same time, then system chooses which one to run (CPU Scheduling).
In Non-multiprogrammed system, there are moments when CPU sits idle and does not do any work.
In Multiprogramming system, CPU will never be idle and keeps on processing.

Time-Sharing Systems are very similar to Multiprogramming batch systems. In fact time sharing systems are an extension of multiprogramming systems.

In time sharing systems the prime focus is on minimizing the response time, while in multiprogramming the prime focus is to maximize the CPU usage.

MULTIPROCESSOR SYSTEMS

A multiprocessor system consists of several processors that share a common physical memory. Multiprocessor system provides higher computing power and speed. In multiprocessor system all processors operate under single operating system. Multiplicity of the processors and how they do act together are transparent to the others.

Following are some advantages of this type of system.

1. Enhanced performance
2. Execution of several tasks by different processors concurrently, increases the system's throughput without speeding up the execution of a single task.
3. If possible, system divides task into many subtasks and then these subtasks can be executed in parallel in different processors. Thereby speeding up the execution of single tasks.

DISTRIBUTED OPERATING SYSTEMS

The motivation behind developing distributed operating systems is the availability of powerful and inexpensive microprocessors and advances in communication technology.

These advancements in technology have made it possible to design and develop distributed systems comprising of many computers that are inter connected by communication networks. The main benefit of distributed systems is its low price/performance ratio.

Following are some advantages of this type of system.

1. As there are multiple systems involved, user at one site can utilize the resources of systems at other sites for resource-intensive tasks.
2. Fast processing.
3. Less load on the Host Machine.

REAL-TIME OPERATING SYSTEM

It is defined as an operating system known to give maximum time for each of the critical operations that it performs, like OS calls and interrupt handling.

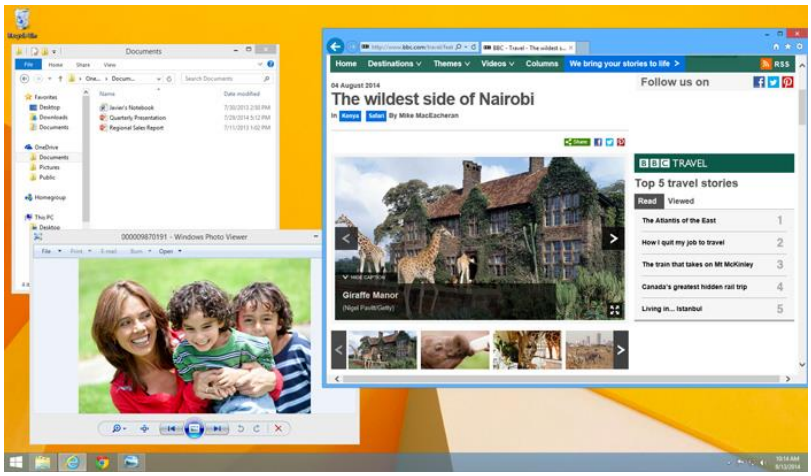
The Real-Time Operating system which guarantees the maximum time for critical operations and complete them on time are referred to as **Hard Real-Time Operating Systems.**

While the real-time operating systems that can only guarantee a maximum of the time, i.e. the critical task will get priority over other tasks, but no assurity of completeing it in a defined time. These systems are referred to as **Soft Real-Time Operating Systems**.

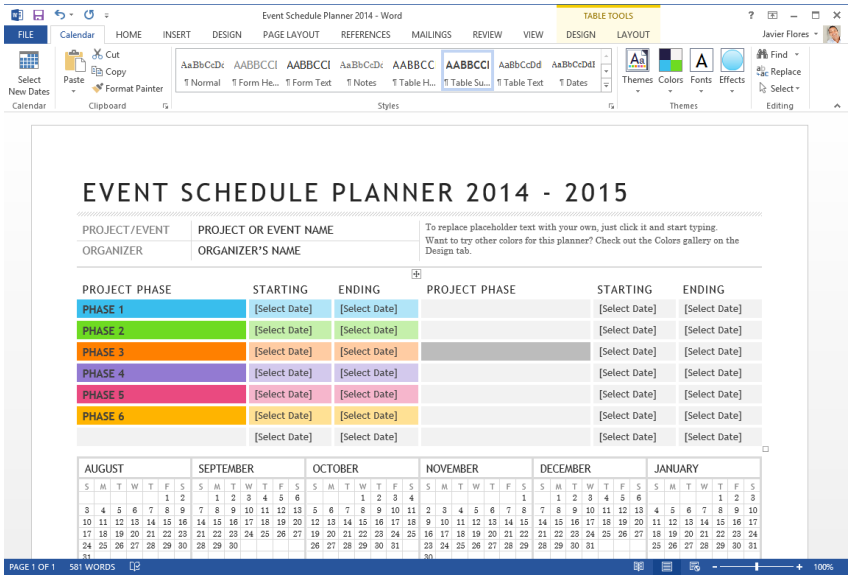
Microsoft Windows

Windows is an **operating system** designed by Microsoft. The operating system is what allows you to use a computer. Windows comes **preloaded** on most new personal computers (PCs), which helps to make it the most popular operating system in the world.

Windows makes it possible to complete all kinds of **everyday tasks** on your computer—for example, you can use Windows to browse the Internet, check your email, edit digital photos, listen to music, play games, and do much more.



Windows is also used in many offices because it gives you access to **productivity tools** such as calendars, word processors, and spreadsheets.



Microsoft released the first version of Windows in the mid-1980s. There have been many versions of Windows since then, but the most recent ones include **Windows 10** (released in 2015), **Windows 8** (2012), **Windows 7** (2009),**Windows Vista** (2007), and **Windows XP** (2001).

Introduction to MS Windows

MS Windows is an operating system that lets you use different types of applications or software. For example, it allows you to use a word processing application to write a letter and a spreadsheet application to track your financial information.

MS Windows is a graphical user interface (GUI). It has pictures (graphical) that you use (user) to communicate (interface) with the computer. This type of system is popular because it's logical, fun, and easy to use.

This operating system has multi-tasking capabilities, meaning it can run several applications at the same time. Multi-tasking allows you to view this lesson on the Internet at the same time you practice using other applications with MS Windows.

Windows XP desktop

Windows XP uses a **desktop** for the standard interface. Think of the desktop as a workspace where you can access everything you need to operate your computer, such as system components, applications, and the Internet.

The desktop contains:

- **Start button**: This is one of the most important tools you will use while working with Windows XP. The Start button allows you to open menus and start applications.

- **Taskbar**: This is primarily used to switch between open windows and applications. Learn more about using the taskbar in a later lesson.

- **Icons (or graphical pictures)**: This represent applications, files, and other parts of the operating system. By default, Windows XP provides you with one desktop icon, the Recycle Bin. Learn more about the Recycle Bin in a later lesson.

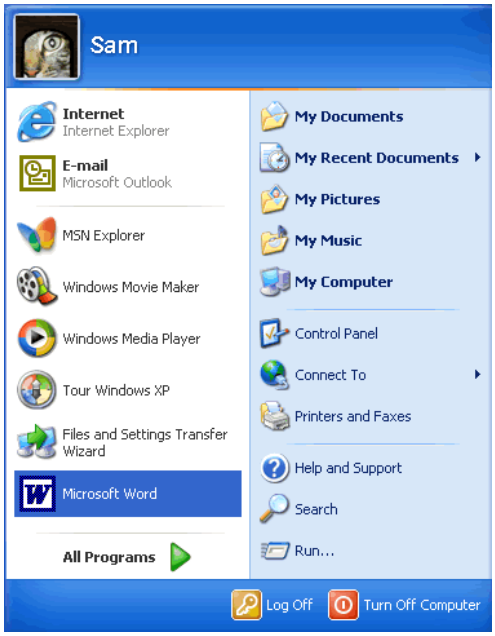
The Start menu

To begin exploring Windows XP, click the **Start** button.

When you click the **Start** button, the **Start menu** appears. The **Start menu** is your gateway to the applications on your computer. The left side of the **Start menu** lists programs, while the right side allows access to common Windows folders (My Documents, for example). It also provides access to **Help and Support**, **Search**, and **Run.**

If you select **All Programs**, a pop-up menu appears. Pop-up menus like this are called **cascading menus**. If a cascading menu is available, a **small black triangle** appears next to the name of the application or function.

In the example below, the Word program has been selected.



To explore the Start menu:

1. Click the **Start** button.
2. Move the mouse pointer to each option, and view the various cascading menus.
3. Click (or roll your mouse pointer over) **All Programs**.
4. Move the mouse pointer to the right, and view other **cascading menus**.
5. To exit the menus, click outside the menu area or press **Esc** on your keyboard.

The **Start menu** remembers items you've recently opened and places each icon on the Start menu so you can easily open them the next time you open the Start menu. For example, if you recently opened Microsoft Word using **Start** → **All Programs** → **Microsoft Word**, the next time you open the Start menu simply click the Word icon on the left side of the Start menu.

Understanding icons

The small pictures on the desktop are called **icons**. One type of icon is an **object icon**. Examples of object icons are My Computer, Recycle Bin, and Internet Explorer. These icons allow you to open files and programs on your computer.

Shortcut icons allow you to open applications quickly. These icons appear on your desktop and with little arrows in the left corner. Desktop shortcuts are links to files and programs. You can add or delete shortcuts without affecting the programs on your computer. You'll learn about creating shortcuts in a later lesson.

To open a program using an icon:

1. Place your mouse over the icon.
2. Text appears identifying its name or contents.
3. Double-click the icon.

Understanding the taskbar

The **taskbar** is the small blue bar you see at the bottom of your desktop. It contains the **Start menu** and the **Quick Launch bar**, which contains **icons** for Internet Explorer, Windows Media Player, and Show Desktop. Click an icon to open a program. Click Show Desktop to quickly view your desktop without closing any programs or windows.

The box on the right is called the **Notification Area**. Here, you'll find the clock and several other icons, depending on what you have installed on your computer. Other icons appear in the Notification Area detailing the status of your activity. For example, when you're printing a document, a printer icon appears. Microsoft also uses the Notification Area to remind you when **software updates** are available for download.

When you open or minimize a window or program, a **rectangular button** appears on the taskbar that shows the name of the application. These buttons disappear when you close a window.

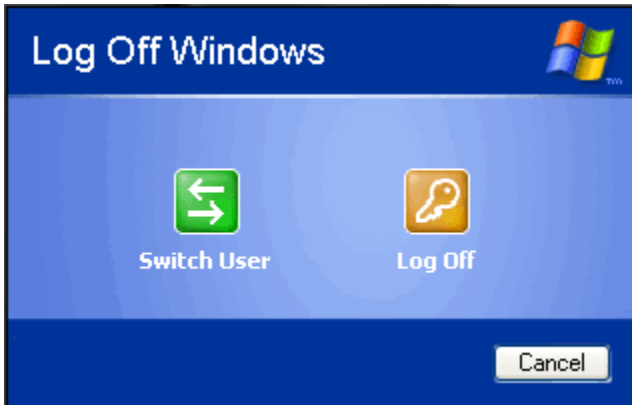
Log off and switch users

More than one person can use your computer. For example, many family members might use the same computer at home, while several coworkers may be able to access your computer on a computer network. Windows XP allows everyone who uses your computer to have separate computer accounts. A computer account tracks each person's unique settings, documents, and email accounts.

Windows XP even enables you to log off the computer so someone else can log in without having to restart the computer.

To log off or switch users:

1. Click the **Start menu**, then click **Log Off**.
2. A dialog box appears asking you if you want to **Switch User or Log Off**.
3. **Switch User** allows someone else to log on to the computer. If you choose to Switch User, your applications will continue to run in the background while the new user logs on.
4. If you choose **Log Off**, your applications will close.
5. In either case, you're taken to a Windows XP log on screen, where you're prompted to enter your username and password.

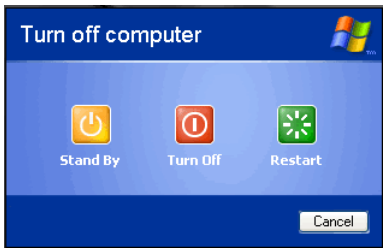


Turn off and restart your computer

When you've finished using Windows XP, be sure to turn off (or shut down) the computer correctly.

To turn off the computer:

1. Click the **Start menu**.
2. Click **Turn Off Computer**.
3. A dialog box opens. Click **Turn Off**.



If you're experiencing computer problems or have installed something new, you can simply **restart** your computer.

To restart the computer:

1. Click the **Start menu**.
2. Click **Turn Off Computer**.
3. A dialog box opens. Click **Restart**.

Recycle Bin

When you delete a file, it is moved to the **Recycle Bin**. This allows you to recover the file if you change your mind. To permanently delete the file, you will need to **empty the Recycle Bin**.

Desktop background

The **desktop background**, or **wallpaper**, allows you to personalize your computer. You can choose a built-in background or use one of your own images

Date & Time and Settings

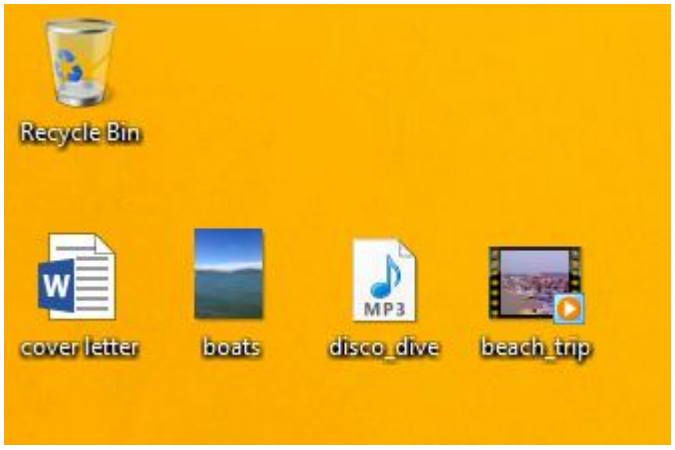
On the right side of the taskbar, you will see the **date and time**. There will also be shortcuts to different settings, like **Internet settings** and**sound volume**.

File Basics

What is a file?

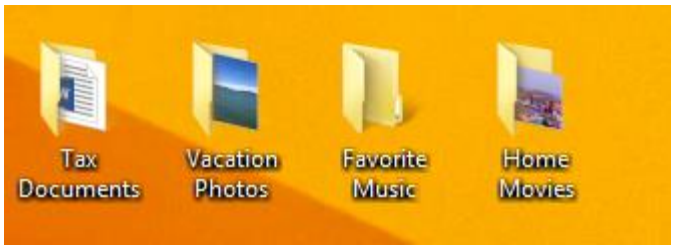
There are many different **types of files** you can use. For example, Microsoft Word documents, digital photos, digital music, and digital videos are all types of files. You might even think of a file as a **digital version** of a real-world thing you can interact with on your computer. When you use different applications, you'll often be **viewing**, **creating**, or**editing files**.

Files are usually represented by an **icon**. In the image below, you can see a few different types of files below the Recycle Bin on the desktop.



What is a folder?

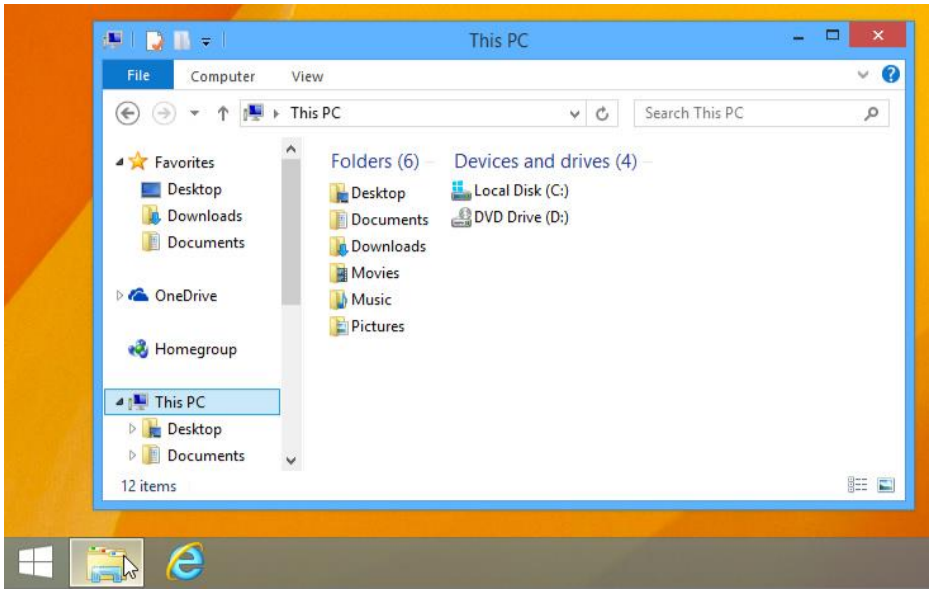
Windows uses **folders** to help you organize files. You can put files **inside a folder**, just like you would put documents inside a real folder. In the image below, you can see some folders on the desktop.



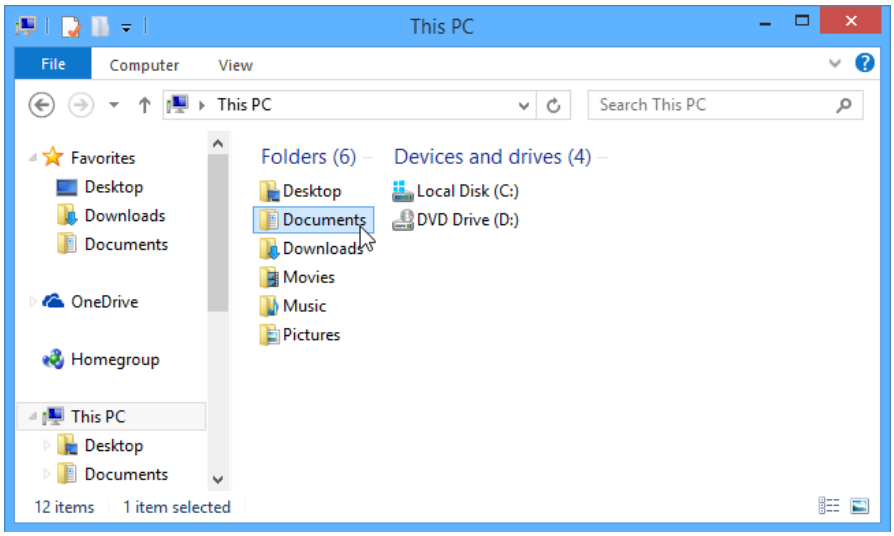
Windows Explorer

You can view and organize files and folders using a built-in application known as **Windows Explorer**

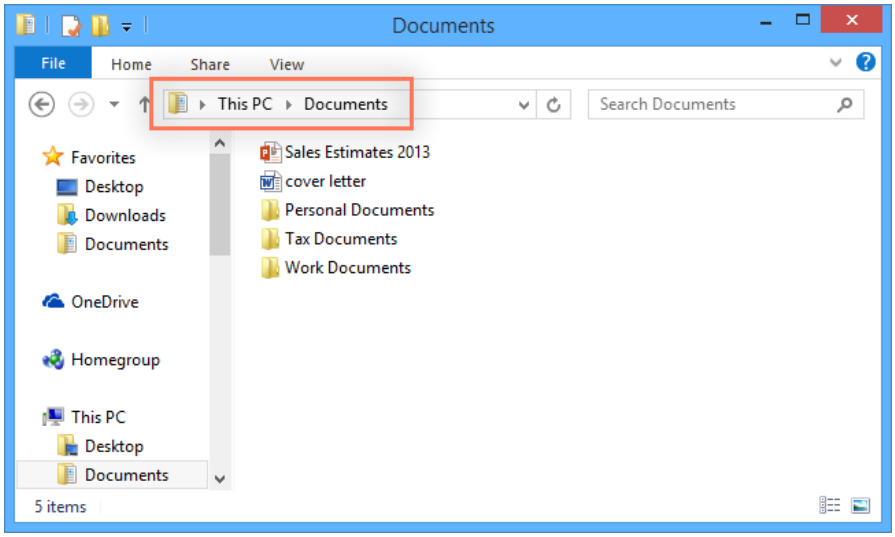
To open Windows Explorer, click the **Windows Explorer** icon on the taskbar, or double-click any folder on your desktop. A new Windows Explorer window will appear. Now you're ready to start working with your files and folders.



From Windows Explorer, **double-click a folder to open it**. You can then see all of the files stored in that folder.



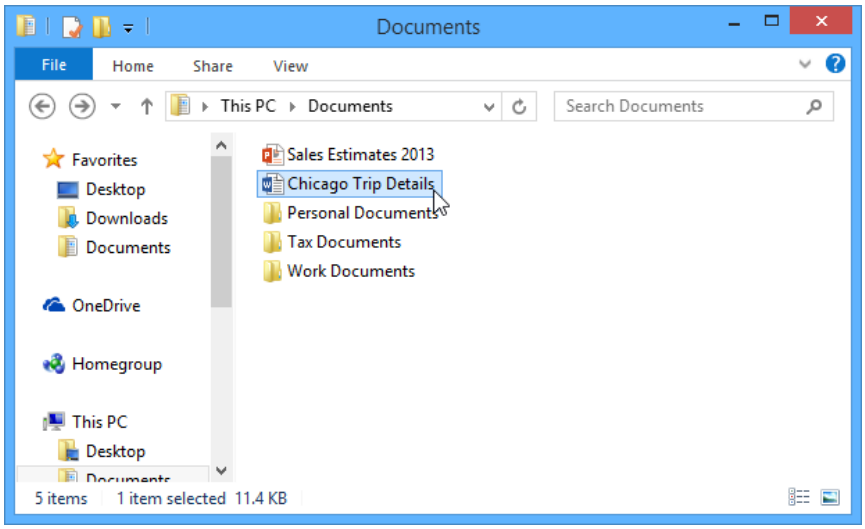
Notice that you can also see the **location** of a folder in the **address bar** near the top of the window.



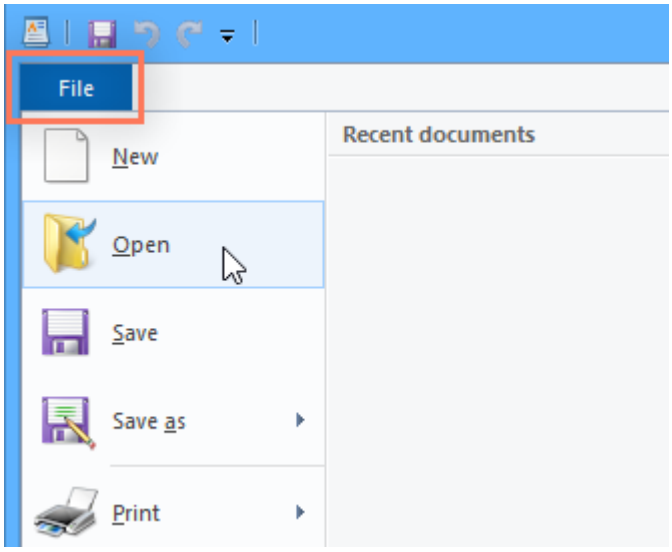
To open a file:

There are two main ways to open a file:

- **Find the file on your computer, and double-click it**. This will open the file in its **default application**. In our example, we'll open a Microsoft Word document (**Chicago Trip Details.docx**), which will open in**Microsoft Word**.



- **Open the application, then use the application to open the file**. Once the application is open, you can go to the **File** menu at the top of the window and select **Open**.



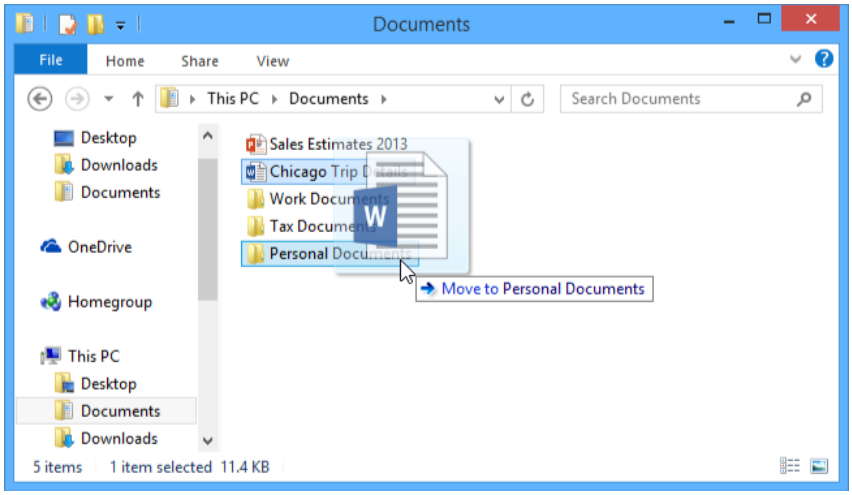
Moving and deleting files

As you begin using your computer, you will start to collect more and more files, which can make it more difficult to find the files you need. Fortunately, Windows allows you to **move files** to different folders and **delete files** you longer use.

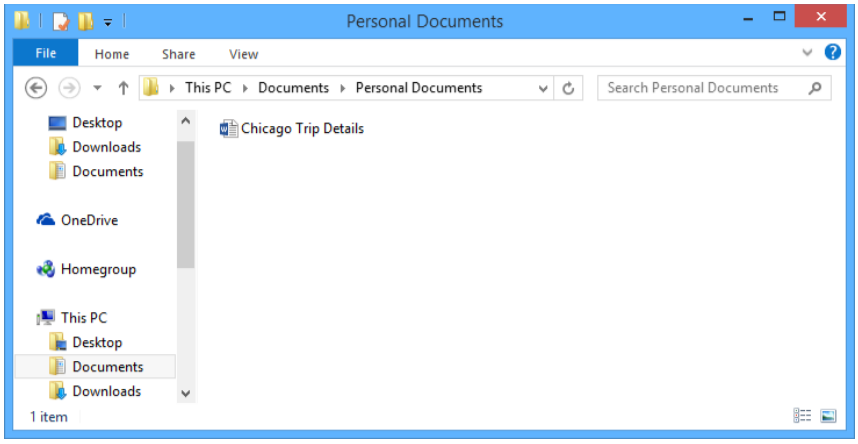
To move a file:

It's easy to move a file from one location to another. For example, you might have a file on the **desktop** that you want to move to your **Documents** folder.

1. Click and drag the file to the desired location.



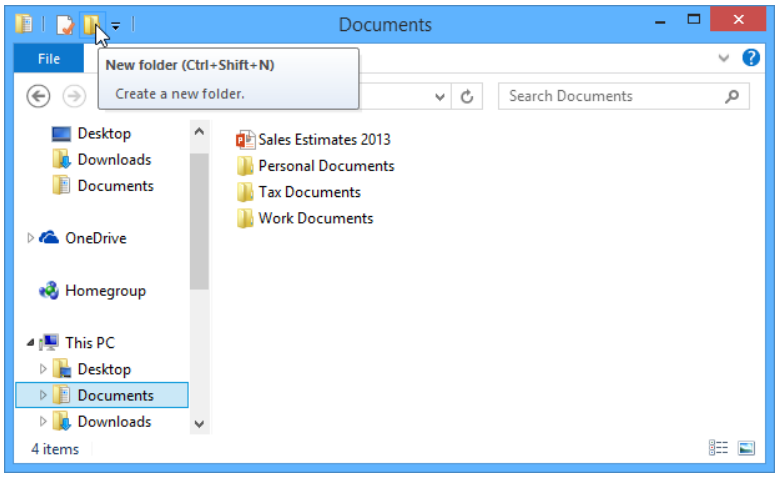
Release the mouse. The file will appear in the new location. In this example, we have opened the folder to see the file in its new location.



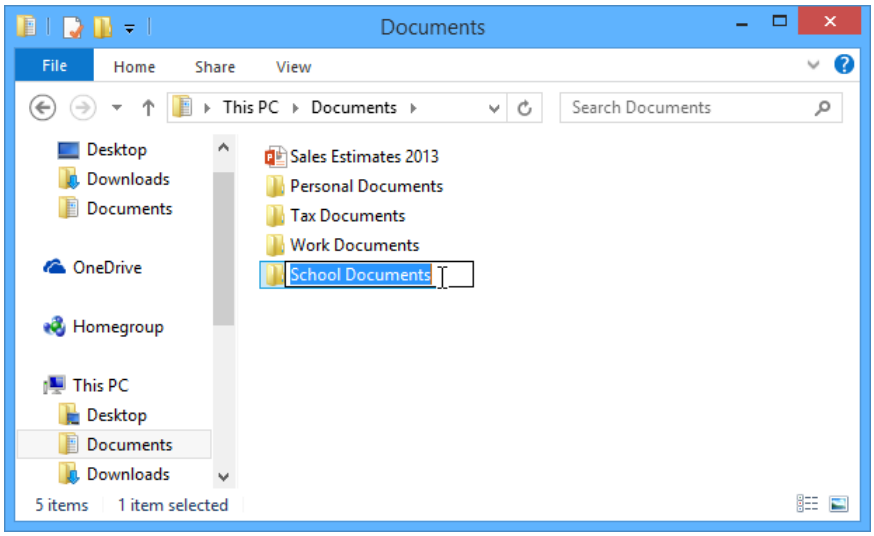
You can use this same technique to **move an entire folder**. Note that moving a folder will also move all of the files within that folder.

To create a new folder:

1. Within Windows Explorer, locate and select the **New folder** button.



2. The new folder will appear. Type the desired **name** for the folder and press **Enter**. In our example, we'll call it**School Documents**.



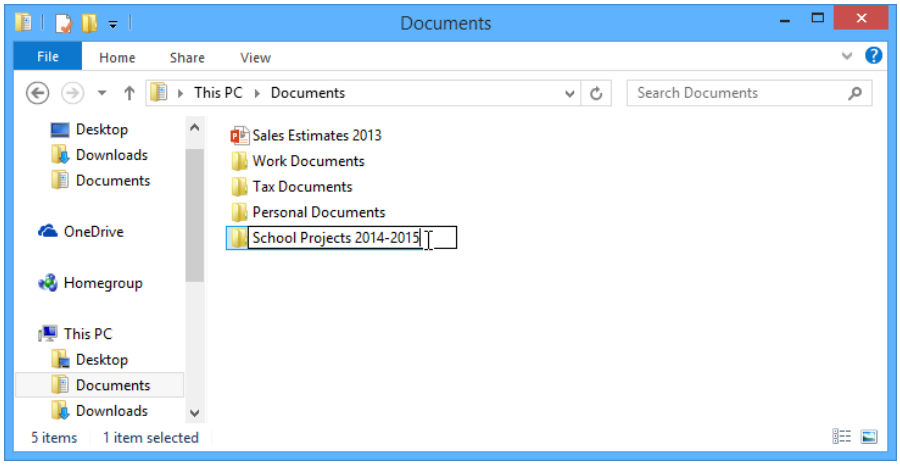
3. The new folder will be created. You can now move files into this folder.

To rename a file or folder:

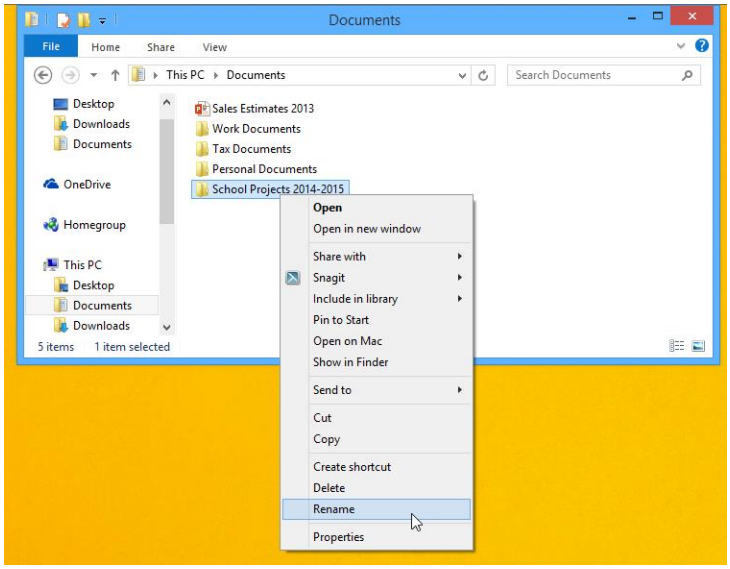
You can change the name of any file or folder. A unique name will make it easier to remember what type of information is saved in the file or folder.

1. Click the file or folder, **wait about one second**, and click again. An editable text field will appear.

2. Type the desired name on your keyboard and press **Enter**. The name will be changed.



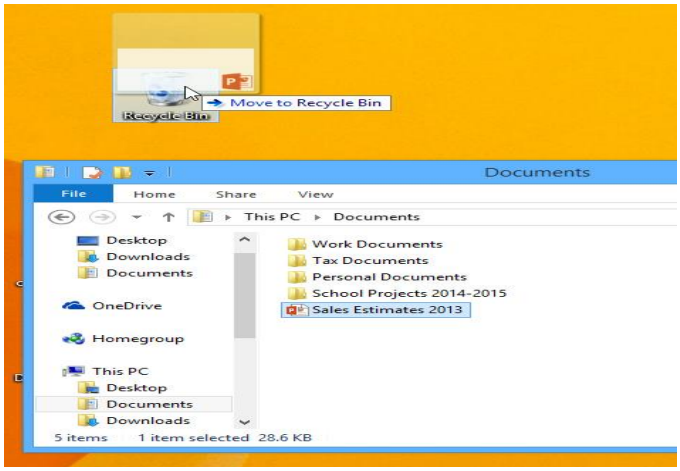
Alternatively, you can right-click it and select **Rename** from the menu that appears.



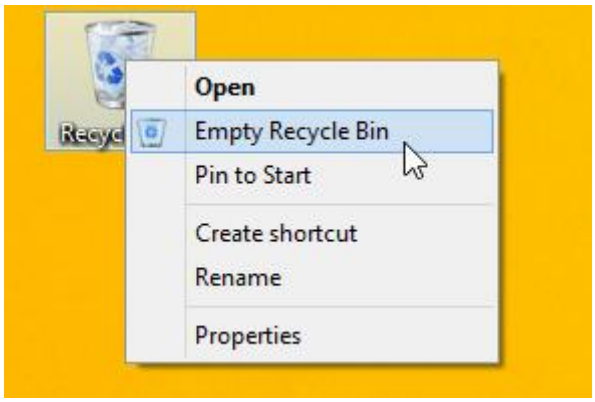
To delete a file or folder:

If you no longer need to use a file, you can delete it. When you delete a file, it is moved to the **Recycle Bin**. If you change your mind, you can move the file from the Recycle Bin back to its original location. If you're sure you want to permanently delete the file, you will need to **empty the Recycle Bin**.

1. Click and drag the file to the **Recycle Bin** icon on the **desktop**. Alternatively, you can click the file to select it and press the **Delete** key on your keyboard.



2. To permanently delete the file, right-click the **Recycle Bin** icon and select **Empty Recycle Bin**. All files in the Recycle Bin will be permanently deleted.



Note that deleting a folder will also delete all of the files within that folder.

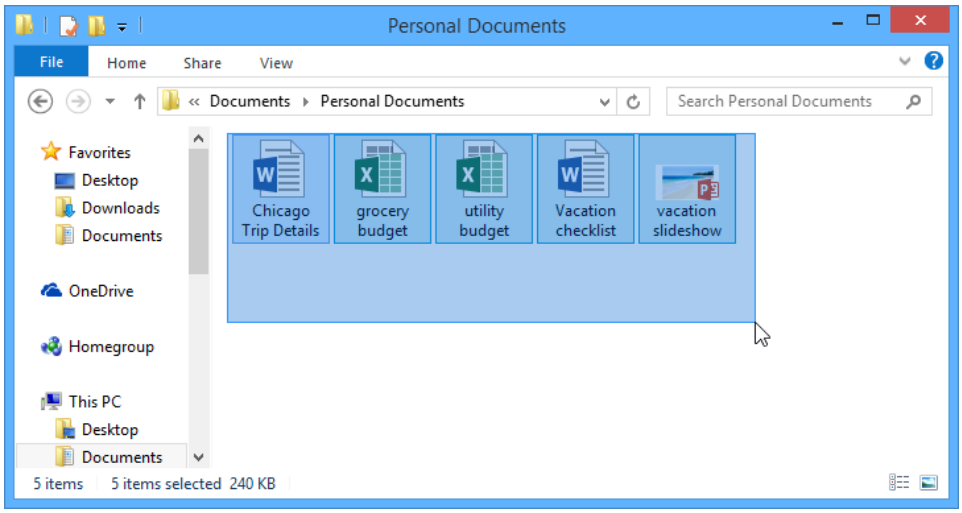
Selecting multiple files

Now that you know the basics, here are a few tips to help you move your files even faster.

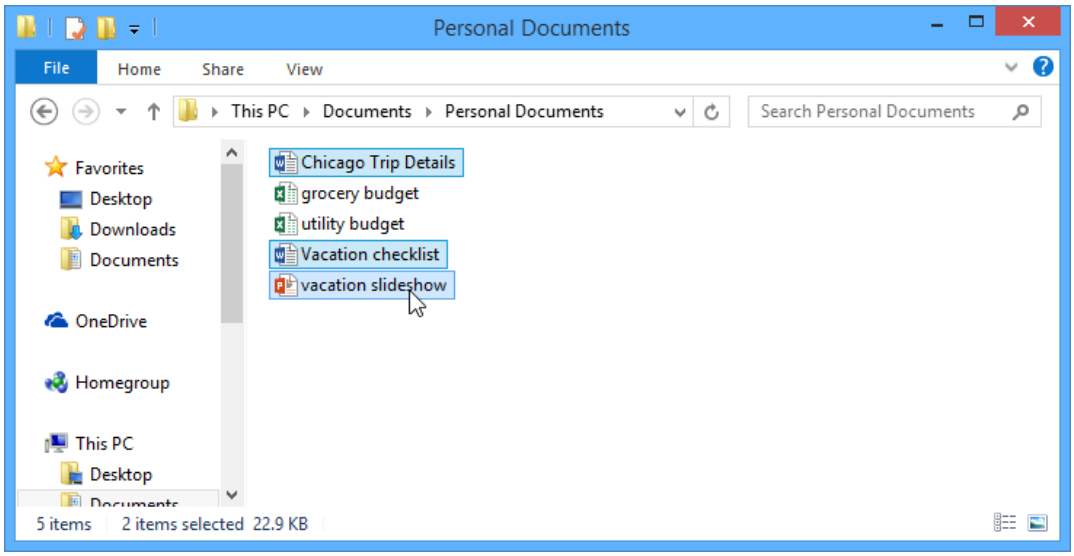
Select more than one file

There are a few different ways to select **more than one file at a time:**

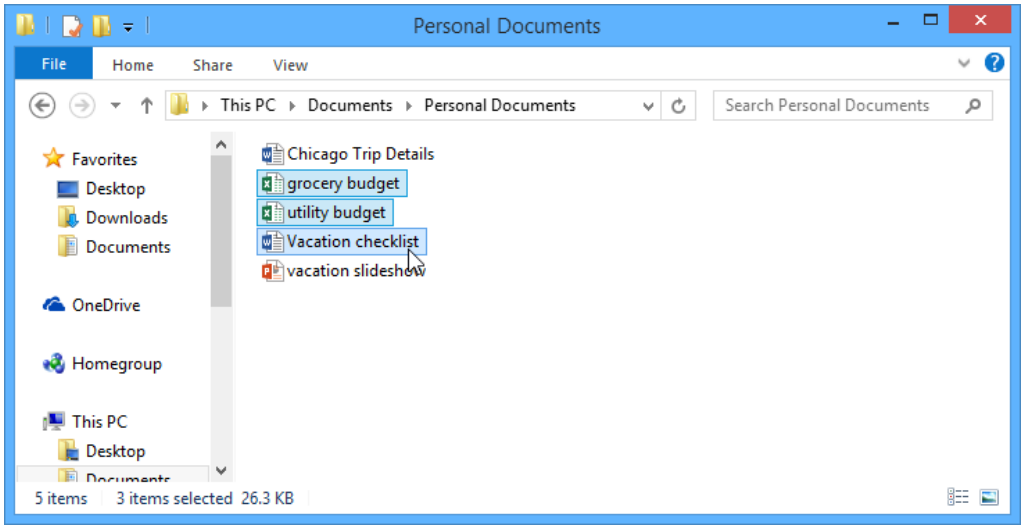
- If you're viewing your files as icons, you can **click and drag the mouse to draw a box** around the files you want to select. When you're done, release the mouse; the files will be selected. You can now move, copy, or delete all of these files at the same time.



- To select **specific files** from a folder, press and hold the **Control** key on your keyboard, then click the files you want to select.

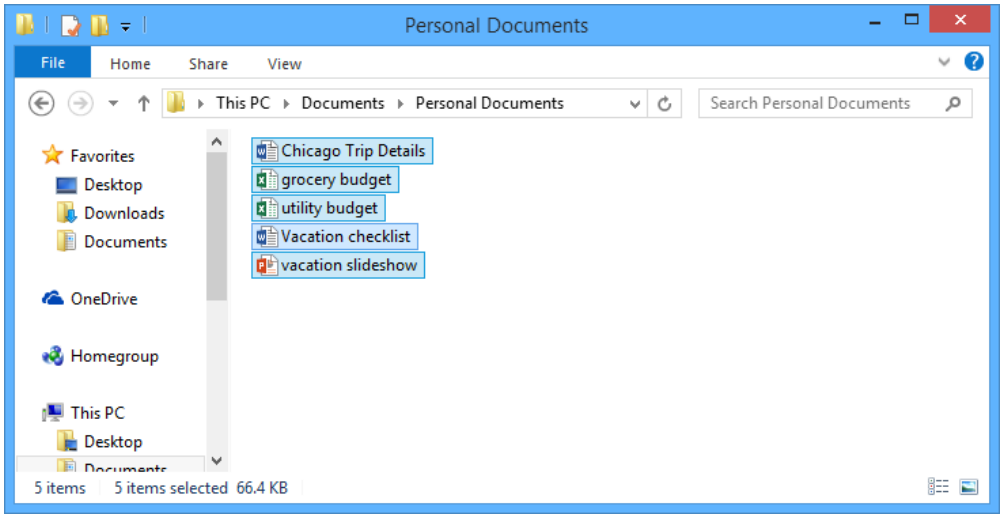


- To select a **group of files** from a folder, click the first file, press and hold the **Shift** key on your keyboard, then click the last file. All of the files between the first and last ones will be selected.



Select all

If you want to select **all files in a folder** at the same time, open the folder in Windows Explorer and press **Ctrl+A**(press and hold the **Control** key on your keyboard and then press **A**). All of the files in the folder will be selected.



Shortcuts

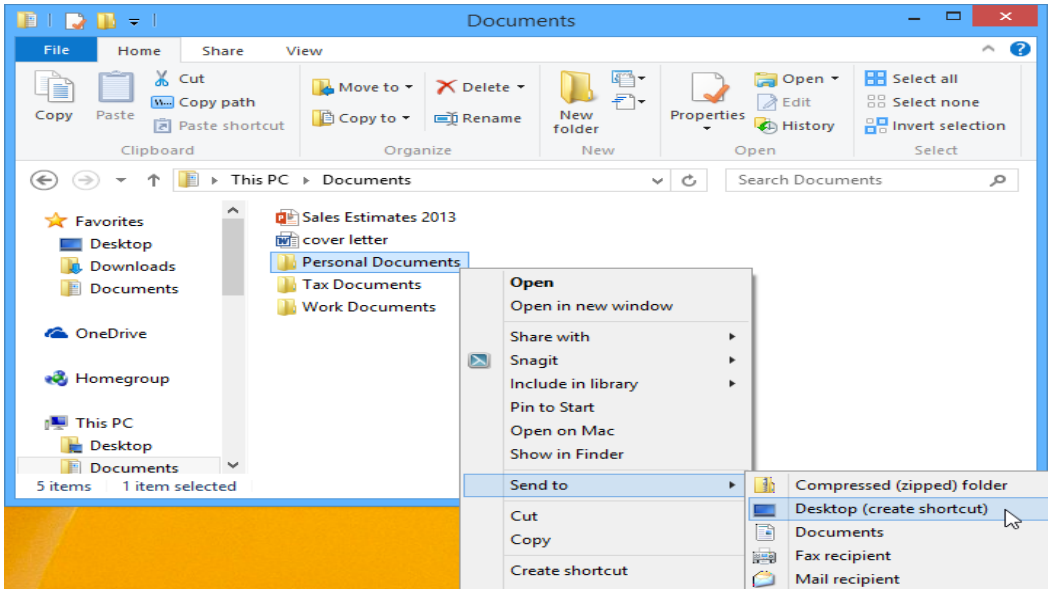
If you have a file or folder you use frequently, you can save time by creating a **shortcut** on the desktop. Instead of navigating to the file or folder each time you

want to use it, you can simply double-click the shortcut to open it. A shortcut will have a small arrow in the lower-left corner of the icon.

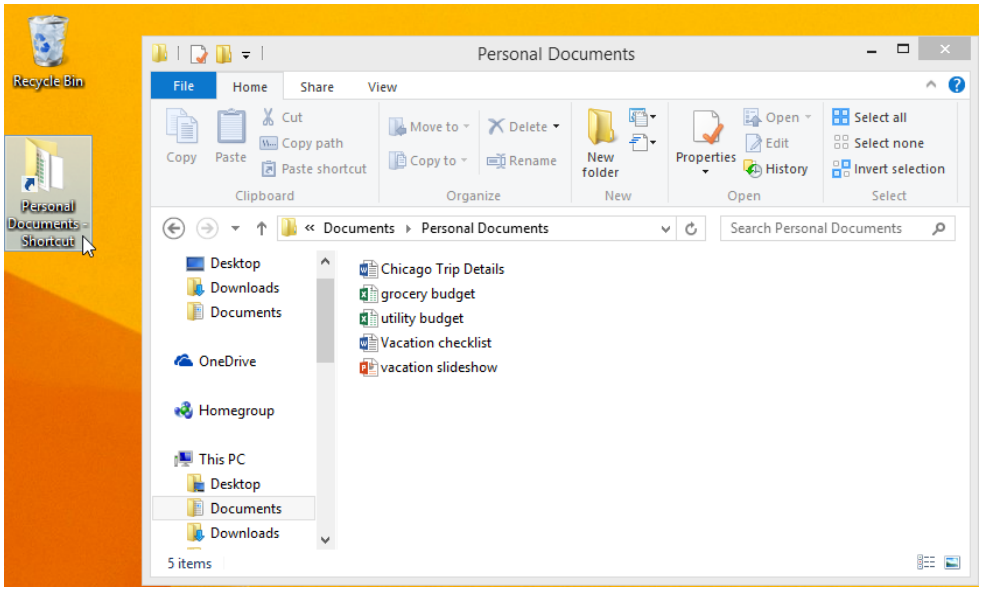
Note that creating a shortcut does **not** create a duplicate copy of the folder—it's simply a way to access it more quickly. If you delete a shortcut, it will not delete the actual folder or the files it contains. Also note that copying a shortcut onto a flash drive will not work; if you want to bring a file with you, you'll need to navigate to the actual location of the file and copy it to the flash drive.

To create a shortcut:

1. Locate and right-click the desired folder, then select **Send to → Desktop (create shortcut)**.



2. A shortcut to the folder will appear on the desktop. Notice the arrow in the lower-left corner of the icon. You can now double-click the shortcut to open the folder at any time.



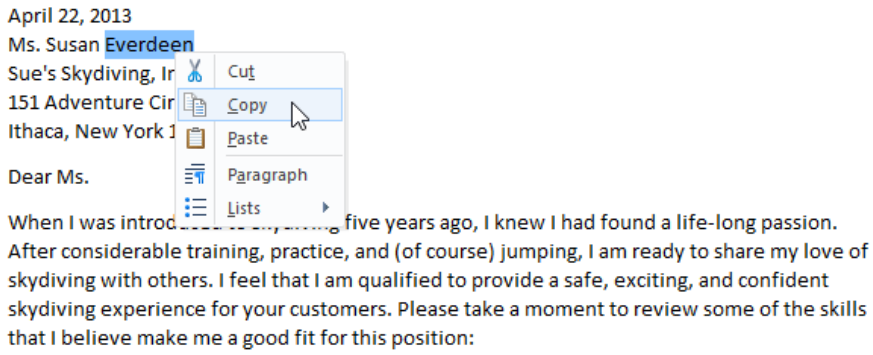
Alternatively, you can hold the **Alt** key on your keyboard and then click and drag the folder to the desktop to create a shortcut.

Cut, copy, and paste

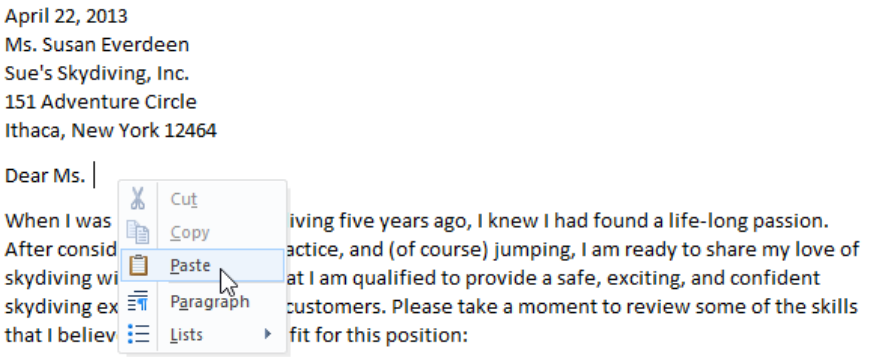
Many applications allow you to **copy** items from one place and then **paste** them to another. For example, if you're working with a word processor, you might copy and paste text to avoid typing the same thing over and over. If there's something you want to move from one place to another, you can **cut and paste** instead.

To copy and paste:

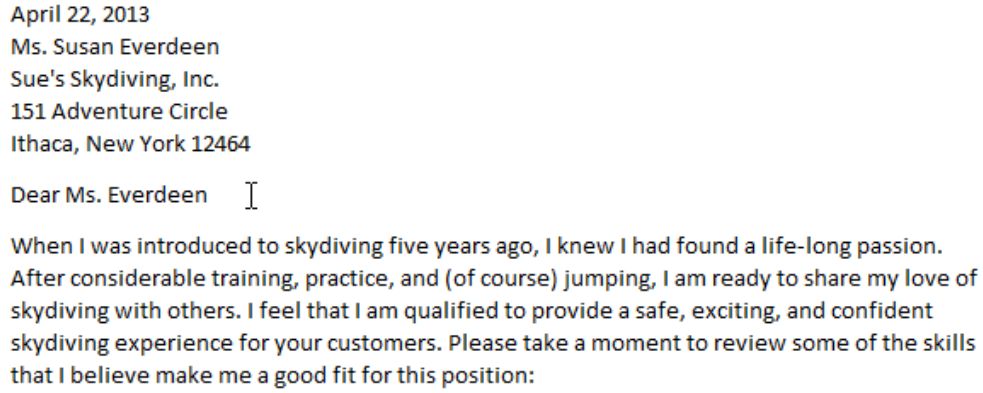
1. Select the item you want to copy. In our example, we'll select a word in a document.
2. Right-click the mouse and select **Copy** from the menu that appears. Alternatively, you can press **Ctrl+C** on your keyboard.



3. Locate and right-click the desired location for the item, then select **Paste**. Alternatively, you can press **Ctrl+V**on your keyboard.



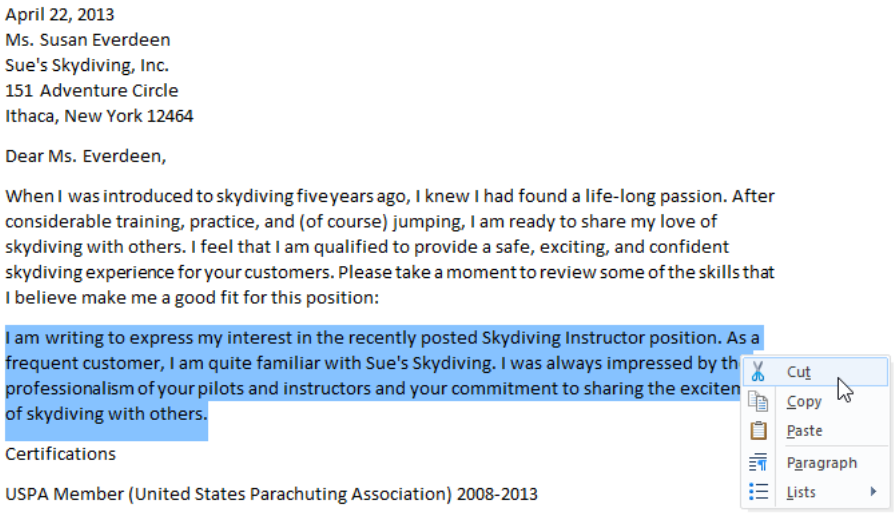
4. The item will be copied to the new location. Notice how the original text that was copied has not been moved or changed.



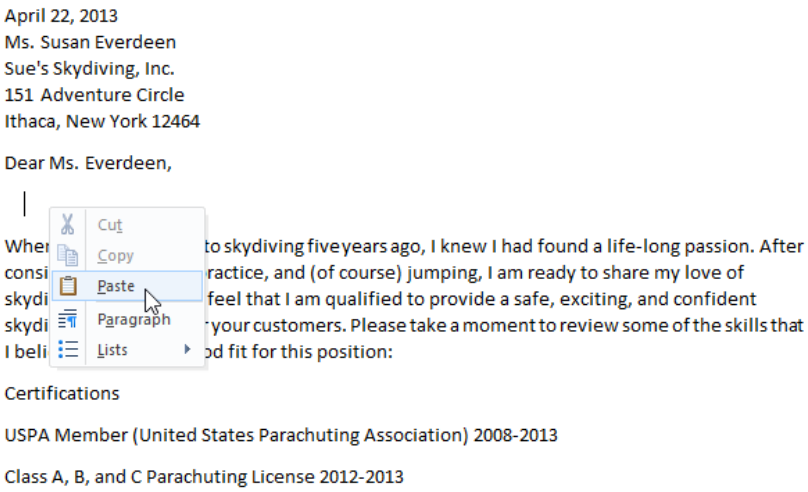
To cut and paste:

1. Select the item you want to cut. In our example, we'll select a paragraph of text in a document.

2. Right-click the mouse and select **Cut** from the menu that appears. Alternatively, you can press **Ctrl+X** on your keyboard.



3. Locate and right-click the desired location for the item, then select **Paste**. Alternatively, you can press **Ctrl+V**on your keyboard.



4. The item will be pasted, or moved, to the new location. In our example, we used the cut and paste commands to move the second paragraph above the first paragraph.

April 22, 2013
Ms. Susan Everdeen
Sue's Skydiving, Inc.
151 Adventure Circle
Ithaca, New York 12464

Dear Ms. Everdeen,

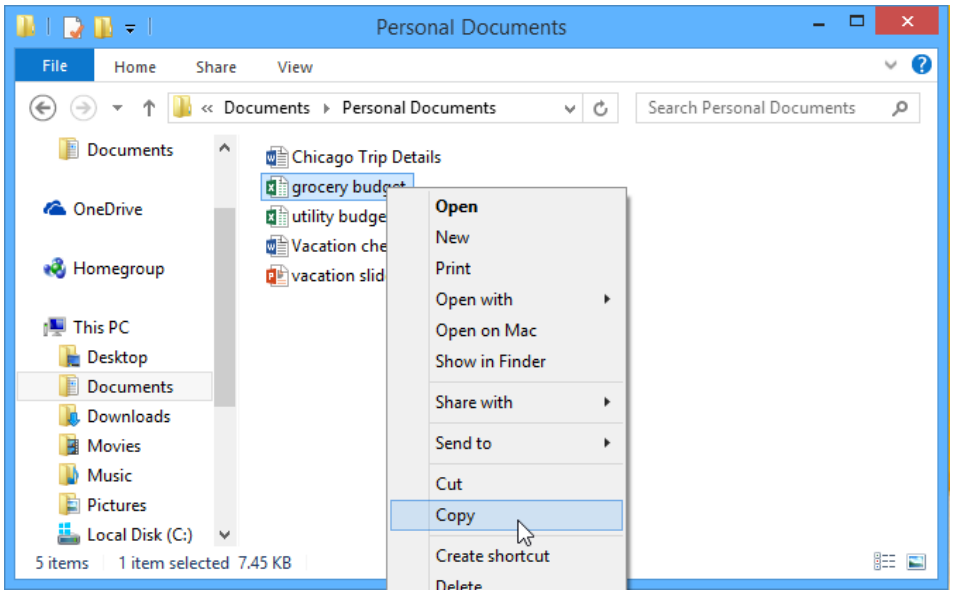
I am writing to express my interest in the recently posted Skydiving Instructor position. As a frequent customer, I am quite familiar with Sue's Skydiving. I was always impressed by the professionalism of your pilots and instructors and your commitment to sharing the excitement of skydiving with others.

When I was introduced to skydiving five years ago, I knew I had found a life-long passion. After considerable training, practice, and (of course) jumping, I am ready to share my love of skydiving with others. I feel that I am qualified to provide a safe, exciting, and confident skydiving experience for your customers. Please take a moment to review some of the skills that I believe make me a good fit for this position:

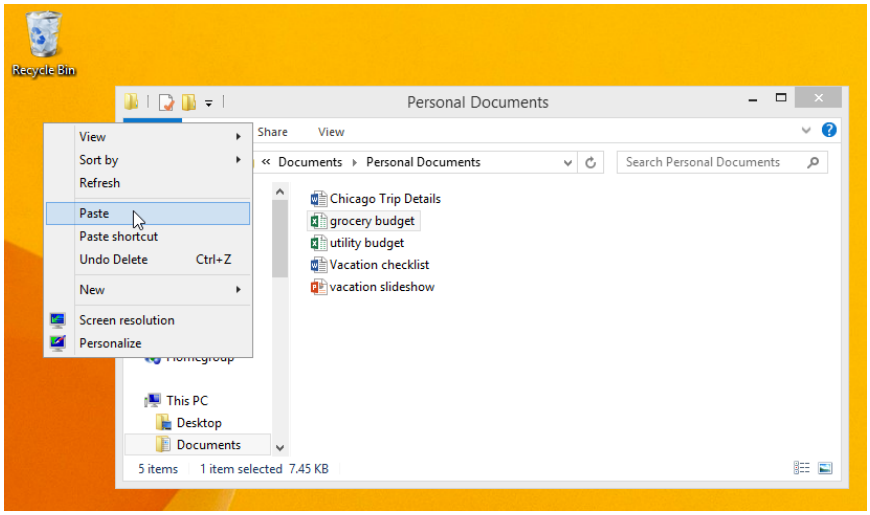
To copy and paste files:

You can use the cut, copy, and paste commands for a variety of tasks on your computer. For example, if you wanted to create a **duplicate** copy of a file, you could **copy it** from one folder to another.

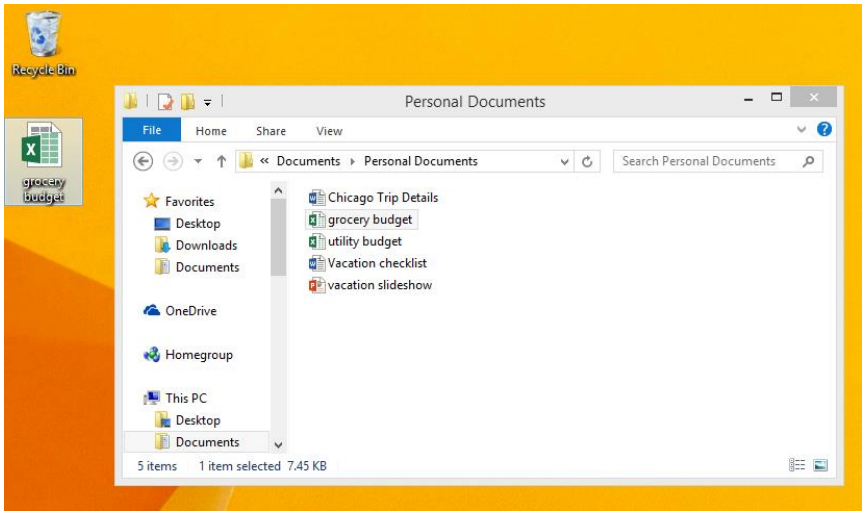
1. Right-click the file and select **Copy** from the menu that appears. Alternatively, you can press **Ctrl+C** on your keyboard.



2. Locate and right-click the new location, then select **Paste**. Alternatively, you can press **Ctrl+V** on your keyboard. In our example, we'll paste the file to the **desktop**.



3. The duplicate file will appear. Notice how the original file has not been moved or changed. Note that if you make a change to the original file, it will **not** update any copies of that file.

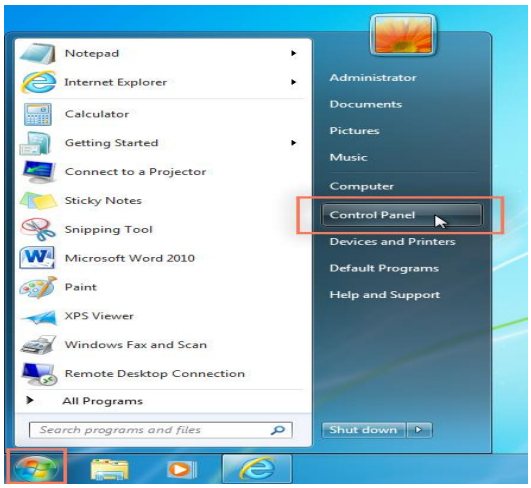


Adjusting your settings

At some point, you may want to adjust your computer's **settings**. For example, you might want to change your**desktop background** or modify your **Internet settings**. You can change many different settings from the **Control Panel**.

To open the Control Panel (Windows 7 and earlier):

1. Click the **Start** button, then select **Control Panel**.



2. The Control Panel will appear. Simply click a setting to adjust it. In this example, we'll click **Change desktop background** to choose a new wallpaper for our desktop.

What are keyboard shortcuts?

Keyboard shortcuts are **keys or a combination of keys** you can press on your keyboard to perform a variety of tasks. Using keyboard shortcuts is often **faster than using a mouse** because you can keep both hands on the keyboard. Keyboard

shortcuts are also **universal**, which means you can use many of the same shortcuts in a **variety of applications**. For example, you can use the shortcuts to copy and paste text in a word processor and in a web browser.

Using shortcuts

Many keyboard shortcuts require you to **press two or more keys in a specific order**. For example, to perform the shortcut **Ctrl+X**, you would press and hold the **Ctrl** key, then press the **X** key, then release.

You'll use the **Ctrl (Control)** or **Alt** key to perform most keyboard shortcuts. You'll find these keys near the bottom-left corner of your keyboard.

Working with text

These keyboard shortcuts are useful when working with text in word processors, email applications, and more. They can help you perform **commonly repeated tasks**, such as **copying and pasting** text.

- **Ctrl+X**: Cut the selected text.
- **Ctrl+C**: Copy the selected text.
- **Ctrl+V**: Paste the copied or cut text.
- **Ctrl+A**: Select all of the text on the page or in the active window.

The Field Bazaar

by Sir Arthur Conan Doyle (1896)

"I should certainly do it," said Sherlock Holmes.

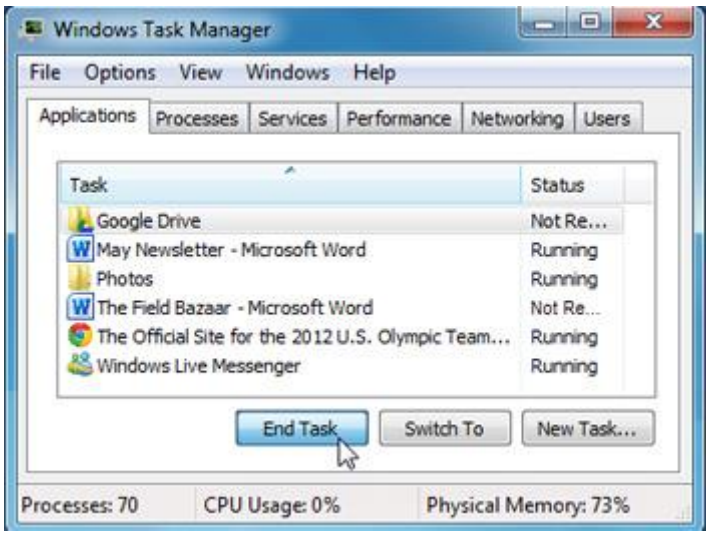
I started at the interruption, for my companion had been eating his breakfast with his attention entirely centered upon the paper which was propped up by the coffee pot. Now I looked across at him to find his eyes fastened upon me with the half-amused, half-questioning expression which he usually assumed when he felt he had made an intellectual point.

- **Ctrl+B**: Bold the selected text.
- **Ctrl+I**: Italicize the selected text.
- **Ctrl+U**: Underline the selected text.

Working with files and applications

You can use keyboard shortcuts to **open**, **close**, and **switch** applications. When working with a file, such as a Microsoft Word document, shortcuts can be used to **create new files**, **find words**, and **print**.

- **Ctrl+Alt+Delete**: Force an unresponsive or frozen program to quit. This keyboard shortcut opens the **Task Manager**. You can then select the unresponsive application and close it.



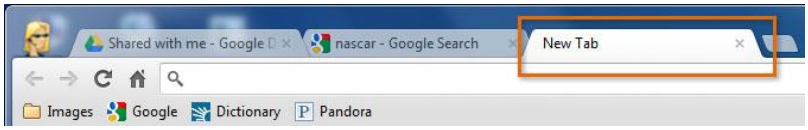
- **Delete**: Send a selected file or files to the **Recycle Bin**.
- **Enter**: Open a selected application or file.

- **Ctrl+N**: Create a new file.
- **Ctrl+O**: Open an existing file.
- **Ctrl+S**: Save the current file.
- **Ctrl+Z**: Undo the previous action. If you want to redo the action, press **Ctrl+Y**.
- **Windows key**: Open the Start menu (or the Start screen in Windows 8).

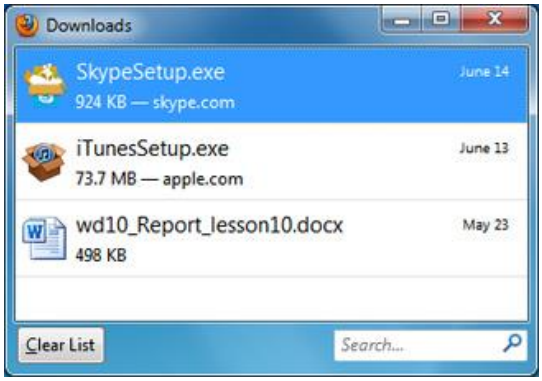
Internet shortcuts

Keyboard shortcuts can also be used to **navigate your web browser**. Many of the **text shortcuts** above are also useful online, such as the shortcuts for **selecting**, **copying**, and **pasting** text into your web browser's address bar. Note that some of these shortcuts may work a bit differently depending on the web browser you're using.

- **Ctrl+N**: Open a new browser window.
- **Ctrl+T:** Open a new browser tab.

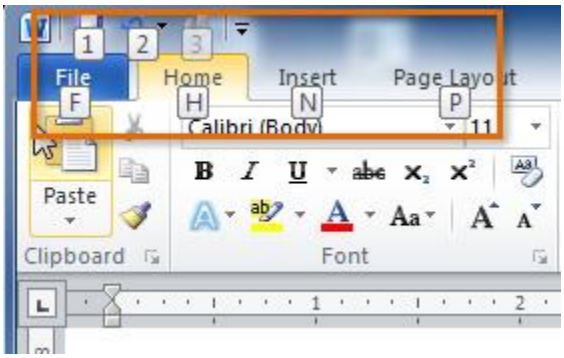


- **Ctrl+D**: Bookmark the current page.
- **Ctrl+B**: View bookmarks.
- **Ctrl+J**: View recently downloaded files.



Using the Alt key to navigate menus

When you press the **Alt key**, you will have access to all of the menus in the current application. This means you can perform almost any task with just your keyboard. For example, you can type **Alt+F+X** to quit an application. When performing these shortcuts, you will not need to hold down the Alt key.



How to find more keyboard shortcuts

In many applications, you'll find keyboard shortcuts next to menu items. In some applications, you may need to hover over a button to display its keyboard shortcut.

Microsoft Word

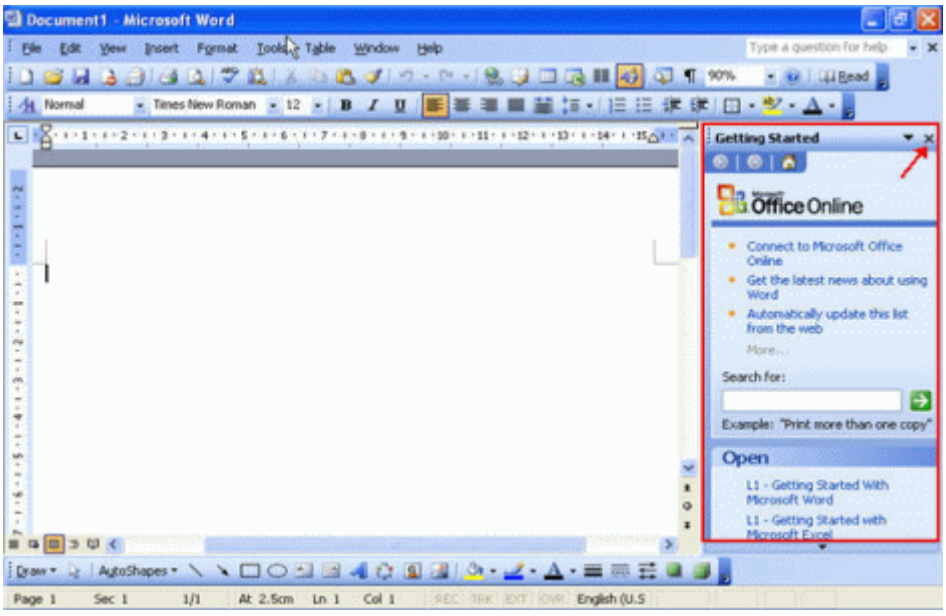
Microsoft Word is part of the Microsoft Office. Its main function is for producing documents that can includes text, graphics, table, clip art, etc.

To start Word using the Windows Start menu

 Click on the **Start**button, point to**Programs**, following by **Microsoft Office** and click on **Microsoft Office Word 2003**.

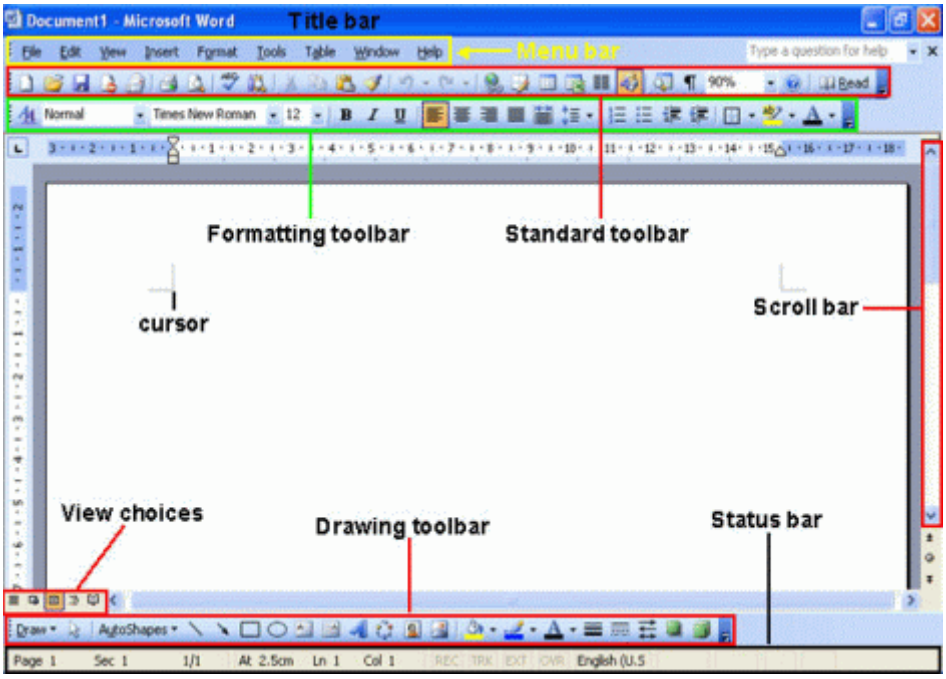
Note: For Office previous version of Office - Click on the**Start** button, point to**Programs** and click on **Microsoft Word**.

 Immediately you will see the screen shown below. In the right hand side of the screen, the Getting Started task pane provides help to you.



 If you are not using it at the moment, click on the **Close** icon to close it.

 The Word window contains a number of standard features including the Menu bar, Standard toolbar, Formatting toolbar, etc.

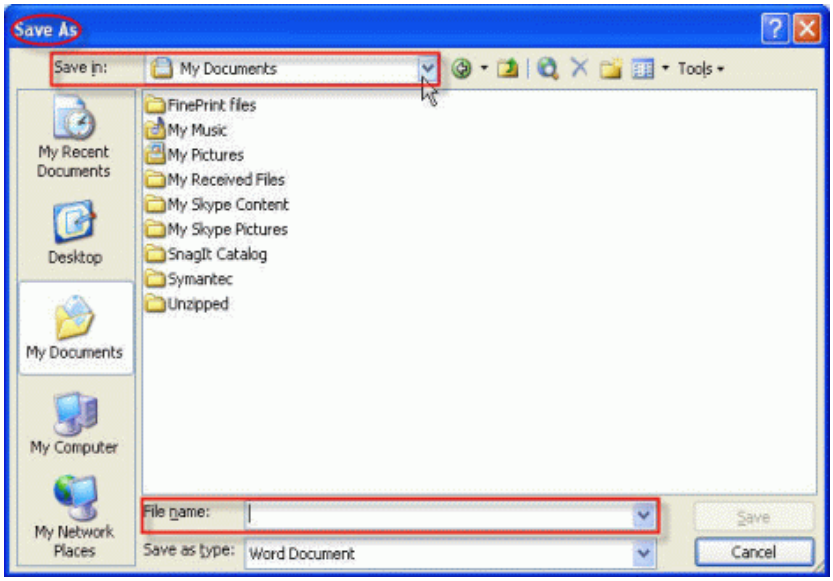


To insert text into a document

- To enter text, just start typing! The text will appear where the blinking cursor is located. For example, you can type the following text into it accordingly.*My name is John Smith. Today I just learn how to type using MS Word.*

To save a file

- From the **File** menu, click **Save**.



 From the **Save in** drop down menu, select the location where you want to save the file or to the different folder by clicking on it.

 In the **File name** box, type in the file name that you would like to give (e.g. File1).

 Click on the **Save** button.

To close a document

 From **File** menu, select **Close**.

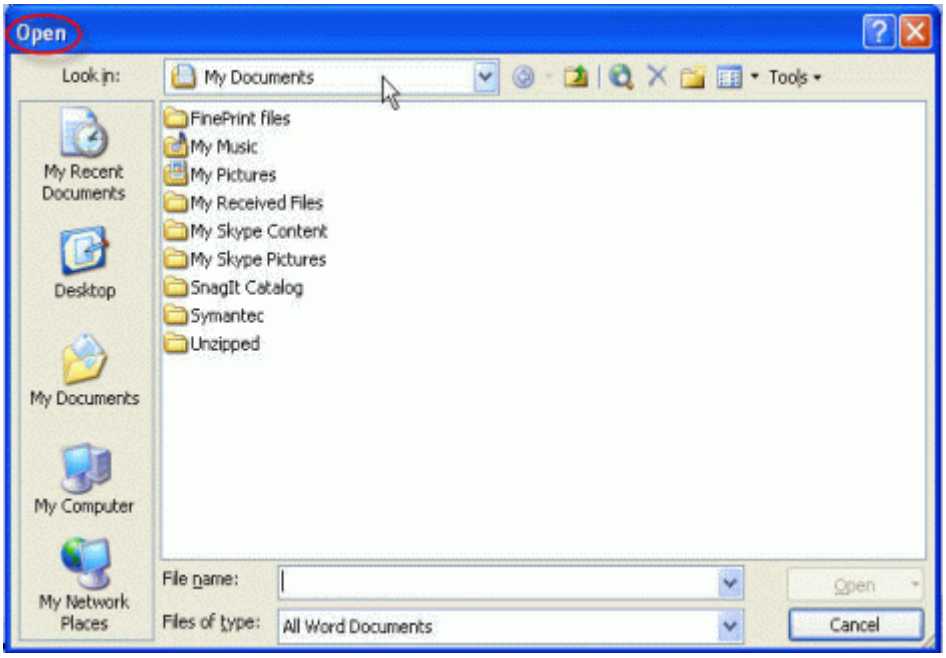
To exit Microsoft Word

 Click on the **Close** icon displayed on the top-right corner of the Word screen.

Opening a file in Microsoft Word 2003

To open a file

 From the **File** menu, click **Open**.



 From the **Open** dialog box as displayed, use the **Look in:** drop down menu to select the drive or folder that contains the file you want.

 To open the file you can either double-click on the file name
OR select the file name by clicking on it, and then click on the **Open** button.

Moving through a Word document

Using the Keyboard Arrow keys

Place the insertion point anywhere in your document. Use the keyboard arrow keys to move up, down, left and right throughout the document.

Using the Keyboard Page Up / Page Down keys

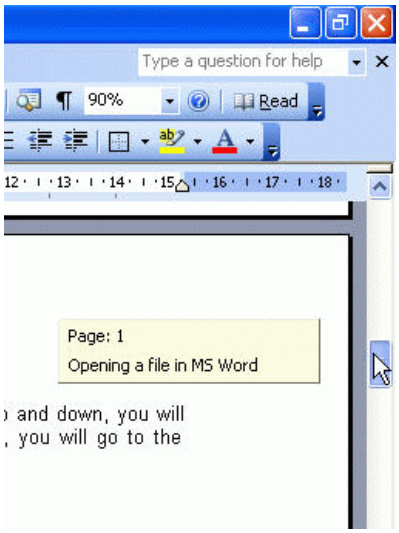
If you press the keyboard **Page Up** or **Page Down** keys you will move through your document by approximately one screen per press.

Using the Scroll Button

If you click once on the down or up arrows at the top or bottom of the scroll bar you will scroll through your document one line at a time.

Using the Scroll Bar

Click on the scroll bar within the vertical scroll bar. As you drag it up and down, you will see page number displayed. When you release the mouse button, you will go to the page number indicated within the yellow colored pop-up.



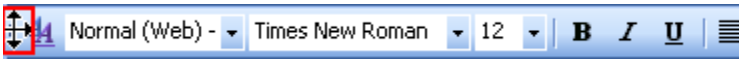
Microsoft Word 2003 Toolbars

To display additional toolbars

- From the **View** menu, point to **Toolbars**.
- From the **Toolbars** sub-menu, click on the required toolbar name. The toolbars that are already displayed on the screen are checked (ticked).

To turn a fixed toolbar to a floating toolbar

- Place the mouse pointer to header of the particular toolbar you wish to move until you see the 'cross' symbol appear.



- Click and drag the mouse to the location you wish to place the toolbar.

To re-attach a floating toolbar

- Move the mouse pointer to the **Title Bar** of the particular floating toolbar you wish to re-attach and double-click with the mouse button.

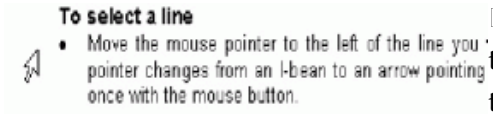
Microsoft Word 2003 Selection Techniques

Important: Before you can apply any formatting to the text, you need to select (highlight) the text first. It can be a word, a line, a paragraph or entire Word document.

To select a word

- Double-click on the word.

To select a line



- Move the mouse pointer to the left of the line you wish to select, until the mouse pointer changes from an I-bean to an arrow pointing upwards and to the right. Click once with the mouse button.

To select a paragraph

- Move the mouse pointer to the left of the paragraph you wish to select, until the mouse pointer changes from an I-bean to an arrow pointing upwards and to the right. Double-click with the left mouse button.

To select the entire document

- From **Edit** menu, choose **Select All**.

Deleting Text in Microsoft Word 2003

If you wish a particular text to be disappear from your Microsoft Word 2003 document, then you can use the **delete** function.

To delete a character

- Place the insertion point to the left of the character to be deleted and press **Delete** key on your keyboard.

To delete a word

- Select the word to be delete by double-click on it and press the keyboard **Delete** key.

To delete a line or lines

- Select the line or lines to be delete (as describe in the Selection Techniques section above)

- Press the **Delete** key.

To delete a block of text

- Select the block of text that you want to delete by dragging the mouse pointer over the text with the left mouse button depressed.

- Once the text is selected press the **Delete** key.

To delete the entire document

- Select the entire document (as describe in the Selection Techniques section above)

- **Press the** Delete **key.**

To copy text, graphic, or other items to the Clipboard

- Select the item you wish to copy to the Clipboard.

- From the **Edit** menu, click **Copy**.

Note: The item here can be highlight text, select a graphic, etc.

To copy multiple items to the Clipboard

- To copy multiple items, simply select each item and copy it to the Clipboard.

Note: Microsoft Office 2003 allows you to copy 24 items to the clipboard at once.

To cut selected items from a document

- Select the items that you want to cut.

- From the **Edit** menu, click **Cut**.

To paste data from the Clipboard

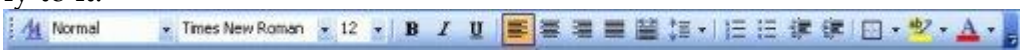
- Select the data/item you wish to **Cut** or **Copy**.
- Use the **Cut** or **Copy** command to place the data in the clipboard.
- Then locate the insertion point at a different location within your current document (or indeed in a different document, or even a different Windows program).
- From the **Edit** menu, click **Paste**.

To paste multiple items from the Clipboard

- If the **Clipboard** toolbar is not displayed, then you can display it by clicking on **View** menu, point to **Toolbars** and click on **Clipboard**.
- Icons on this toolbar include **Copy, Paste All** and **Clear Clipboard**.
- To paste an item simply click on the appropriate icon on the **Clipboard**toolbar.
- To paste multiple items, just click on the multiple icons located on the**Clipboard** toolbar.

Formatting Toolbar and Text Formatting in Word 2003

The **formatting toolbar** is a toolbar that contains icons on it as shown below. Each of the icons has a specific purpose that can change the outlook of your document text when you apply to it.



The **formatting toolbar** is designed to apply many effects of text. Here is the list of icons and it function:

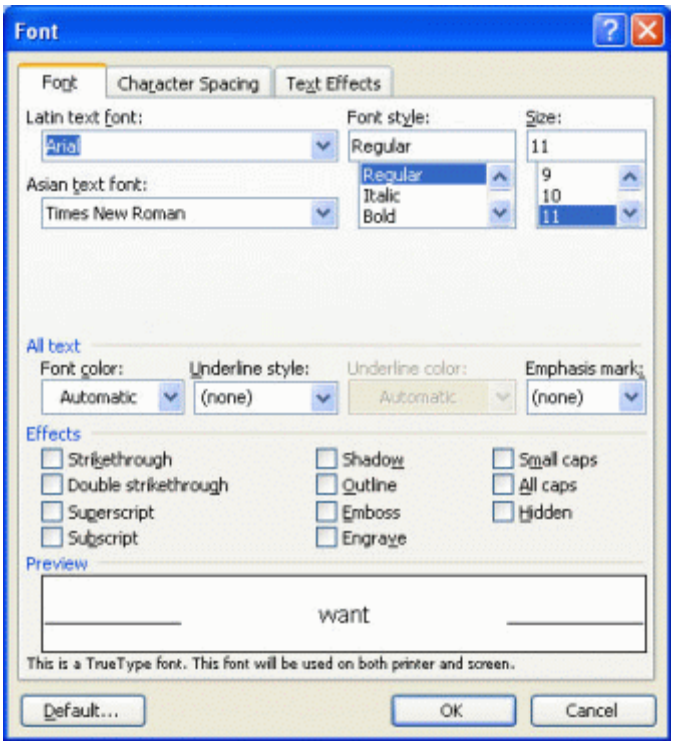
Icon	Function
Style Menu	Allows you to define a group of paragraph and character formats as a style, and then the styles in a style sheet.
Font Menu	Click the arrowhead to the right of the font name box to view the list of fonts available. Scroll down to the font you want and click once to select it.
Font Size	Click on the white part of the font size box to enter a value for the font size or click the arrowhead to the right of the box to view a list of font sizesavailable. Select a size by clicking on it once. A font size

	of 10 or 12 is best for paragraphs of text.
Font Style	Use these buttons to bold, italic and underline the selected text.
Alignment	Text can be aligned to the left, center, or right side of the page or it can be justified and distributed across the page.
Line Spacing	Allows you to set the amount of space between one line to another line.
Numbering and Bullets	It is used to set-off and emphasize sections of text and are presented by dots or numbers.
Increase/DecreaseIndent	Change the indentation of a paragraph in relation to the side of the page.
Outside Border	Add a border around selected text.
Highlight	Use this option to change the color behind a selected text. The color shown on the button is the last color used. To select a different color, click thearrowhead next to the button.
Font Color	This option changes the color of the text. The color shown on the button is the last color chosen. Click the arrowhead next to the button to select another color.

To change the font used by selected text

- Select the text that you wish to apply a different font to. This can be any amount of text in the document from the single character, a word, a sentence, a paragraph, or the entire document.

- From the **Format** menu, click **Font**.



- From the **Font** dialog box, change from the following options:

Text font	Specifies the overall look of the character set.
Font Style	Determines the emphasis given to a character, i.e. Bold or Italic.
Size	Determines the size of the character in points. The higher the points, the larger the character will be.
Font Color	Determines the color of the text as it appears on the screen.
Underline style	Determines whether you have None, Single, Double, or Word Only underlining etc.
Underline Color	Determines the underline color of the text appears on the screen. Only available after you choose the underline style.
Strikethrough	A strikethrough line is drawn through selected characters.
Double Strikethrough	Two strikethrough lines are drawn through selected characters.

Superscript	Text is raised above its normal position on the text line.
Subscript	Text is lowered below its normal position on the text line.
Shadow	Adds a shadow behind the text.
Outline	Displays the inner and outer borders of each character.
Emboss	Text appears to be raised off the page in relief.
Engrave	Text appears to be printed or pressed into the page.
Small caps	Text is formatted in capital letters (smaller size).
All caps	Text is formatted in capital letters (normal size).
Hidden	Characters are hidden on the page.
Preview	The effect of the font is displayed before you apply it.

- When finish, click on the **OK** button or press **Enter**.

To highlight pre-selected text

- Select the text you wish to highlight.

- Click on the **Highlight** icon on the **Formatting** toolbar and the selected text will be displayed with a yellow box around it.

To remove highlighting from text

- Select the text that the highlighting is to be removed from.

- Click on the **Highlight** icon on the **Formatting** toolbar.

To change the color used for highlighting

Click on the down arrow to the right of the **Highlight** icon on the **Formatting** toolbar. This will display a range of colors that you can select from. Once you have selected an alternative this will become the default highlight color, until you select a different color.

Using Bullet and Numbering

What is the bullet and numbering feature in Word?

Bullets are used to set-off and emphasize sections of text and are symbols such as dots or diamonds.

The **numbering**feature also acts like the bullets only that it use the number instead of symbol to represent.

Why bullet and numbering is so critical to your document?

- Break the long sentence into points form.
- Enhance readability and credibility.
- Grab attention and highlight important points.

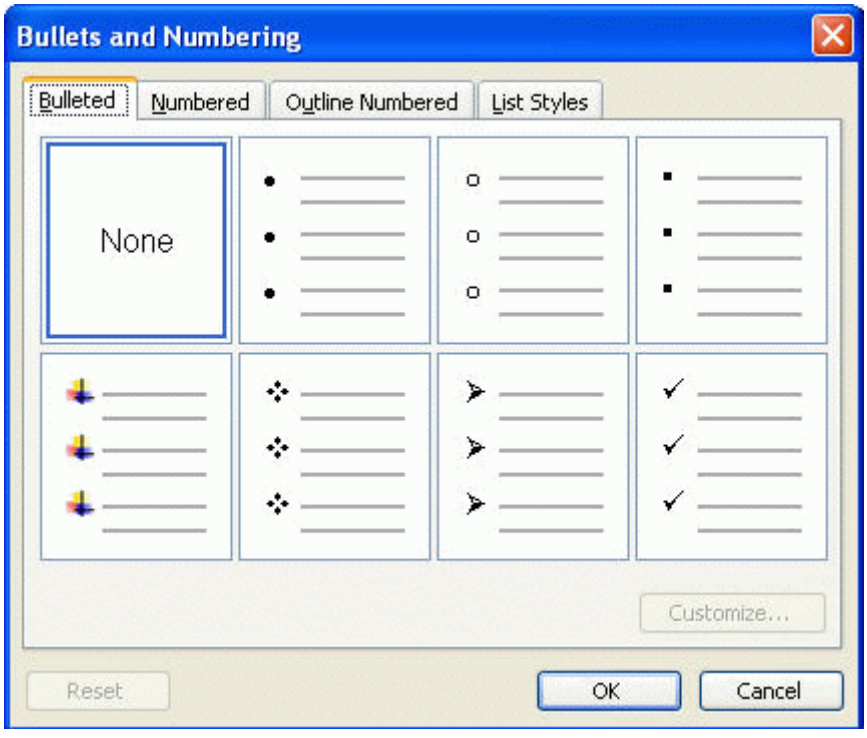
Then, here I let you know how to apply bullet or numbering in Microsoft Word.

To apply default bullet formatting to a list

- Select the list you wish to apply number of bullet formatting to.
- Click on the **Bullets** icon on the **Formatting** toolbar.

To apply alternate bullet formatting to a list

- Select the text you want to add bullets to.
- From the **Format** menu, click **Bullets and Numbering**.
- From the **Bullets and Numbering** dialog box displayed, the **Bulleted**tab should be displayed, if not, select it.



- A list of different bulleted styles will appear, select a style that you like.

- Click on the **OK** button or press **Enter**.

To remove bullet formatting from a list

- Select the list to which the bullet formatting has been applied.
- Click on the **Bullets** icon on the **Formatting** toolbar.

To add numbering to a list

- Select the text you wish to re-format as a numbered list.
- Click on the **Numbering** icon on the **Formatting** toolbar.

To add alternative numbering styles to a list

- Select the text you wish to re-format as a numbered list.
- From the **Format** menu, click **Bullets and Numbering**.
- From the **Bullets and Numbering** dialog box displayed, click on the**Numbered** tab.
- A list of different numbered styles displayed, select the numbering format that you require.
- Click on the **OK** button or press **Enter**.

To remove numbering from a list

- Select the list to which the bullet formatting has been applied.
- **Click on the** Numbering **icon on the** Formatting **toolbar.**

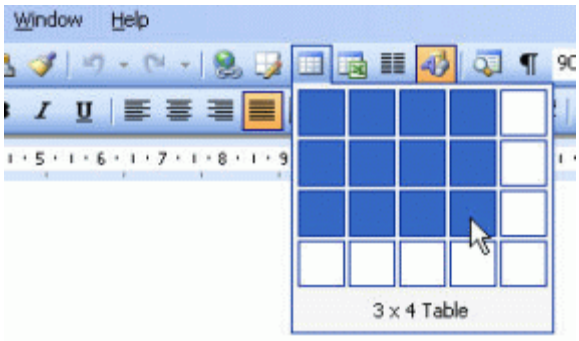
Microsoft Word Table

Microsoft Word table feature enables you toorganize items in columns and rows. They are **easier** tomanipulate and readthe data display in table format.

Inserting table is easy but do you really know how to manipulate it? For example, you wish to merge or split table cells, insert, resize and delete row or column…can you do it?
Here is the **proper guides** for you.

To create a table using the Insert Table icon

- Place the cursor at the location you wish to place the table.
- Click on the **Insert Table** icon on the **Standard** toolbar and drag the mouse over the grid to select the number of rows and columns you required.



Note: You will notice that the maximum number of columns and rows are 4 X 5 Table. If you are creating a Microsoft Word table that is more that 4 X 5, just click on the existing grid and drag the mouse to the required columns and rows.

To enter text into a Microsoft Word table

- Click on any cell and start typing text or number to the table.
- To move from cell to cell use the **Tab** key or mouse click.

To resize column widths and row heights

- Change the column widths and row heights by clicking the cell dividers and dragging them with the mouse.

To select a column or multiple columns

- Move the mouse pointer to the top of the column and the cursor will change from an I-bean to a small, thick downward pointing arrow. Click to select the column.
- If you wish to select multiple columns, just drag the mouse across the columns.

To select a row or multiple rows

- Move the mouse pointer to the left of the outside table row you wish to select, until the mouse pointer changes from an I-bean to an arrow pointing upwards and to the right. Click once to select the row.
- If you wish to select multiple rows, just drag the mouse to select few rows at once.

To select the whole table

- Click anywhere inside the table.
- From the **Table** menu, point to **Select** and click on **Table**.

To insert a column or row into the table

- From the existing table, select the column or row where you want the new one to appear.

- From the **Table** menu, point to **Insert** and select the appropriate options: **Columns to the Left / Columns to the Right / Row Above / Row Below**.

To delete a column or row from the table

- Select the column(s) or row(s) you want to delete.

- From the **Table** menu, point to **Delete** and select either **Columns / Rows**.

To delete the entire Microsoft Word table

- Click anywhere within the table.

- From the **Table** menu, point to **Delete** and select **Table**.

OR click the **Cut** icon on the **Standard** toolbar.

To merge cells in a table

- Select the cells you wish to combine to make a single cell.

- From the **Table** menu, click **Merge Cells**.

To split cells in a table

- To split cells into two or more cells, select the cells you wish to split.

- From the **Table** menu, click **Split Cells**.

- From the **Split Cells** dialog box displayed, enter the number of columns or rows you wish to split the cell into and then select **OK** or press **Enter**.

To split a Microsoft Word table

- Place the insertion point where you want to split the table. For example, we have a table that contains 5 rows, so place the insertion point on row 3.

- From the **Table** menu, click **Split Table**.

- A blank row will appear in the table, above the current row, to create a separate table.

Drawing Toolbar

Drawing toolbar can be use to create a drawing that contains many objects, i.e. circles, lines, autoshapes, arrows, etc and they can be layered behind each other.

To display a drawing toolbar

- From the **View**menu, point to**Toolbars** and click**Drawing**.

OR right-click on an existing toolbar and choose **Drawing** from the drop down list.

To create a drawing

- In the toolbar, click on the **AutoShapes**icon and choose a shape from one of the menus.

- Draw your object on the document by dragging the mouse and holding down the left mouse button.

- Please practices as much as possible the different shapes from the**AutoShapes** icon in order to get familiar with it.

Note: You only can draw objects in Microsoft Word when you are in**Print Layout** view.

Drawing toolbar icons and functions are listed below:

Draw	Enables you to apply lots of changes to the drawing object such as flip, rotate, text wrapping, etc.
Select Objects	Enables you to select a particular drawing object.
AutoShapes	Click on the **AutoShapes** button to bring up a list of shape menus.Drag the mouse on to a selected set of shapes and select one from the list.
Line	Used to draw a line. To draw perfectly horizontal or vertical line, depress the Shift key while dragging.
Arrow	Used to draw a line with an arrowhead on it.
Rectangle	Used to draw a rectangle. To draw perfect square, depress the Shift key while dragging.
Oval	Used to draw an oval. To draw perfect circle, depress the Shift key while dragging.
Text Box	Used to draw a text box into which you can enter text.
Vertical Text Box	Used to draw a text box into which you can type a vertical text.

Insert WordArt	Used to insert WordArt.
Insert Diagram or Organization Chart	Used to insert Diagram or Organization Chart.
Insert Clip Art	Used to insert clipart.
Insert Picture	Used to insert pictures from the location that you saved before.
Fill Color	Used to fill a drawing object with a color or shading.
Line Color	Used to define the line color of a drawing object.
Font Color	Used to formats the selected text with the color you pick.
Line Style	Used to define the line style used by an object.
Dash Style	Used to define the dashed line style used by an object.
Arrow Style	Used to define the arrow line style.
Shadow Style	Click the shadow style you want for the selected object.
3-D Style	Click the 3D style you want for the selected object.

To draw lines, arrows, rectangles and ovals

- Click on the icon you wish to select on the **Drawing** toolbar, i.e. click on the **Oval** icon, to draw an oval.
- Move to the position on the document that you wish to draw the object.
- Depress the left mouse button and drag the mouse to create the size of object you require.
- Release the mouse button when the object is the desired length or shape.

To create a text box

- From the **View** menu, click **Print Layout** to ensure you are in this view.
- Place the insertion point where you want to create the **Text Box**.

 From the **Insert** menu, click **Text Box**.
OR click on the **Text Box** icon on the **Drawing** toolbar.

 Position the cross-hair pointer using the mouse and depress the left mouse button. Drag the mouse until the size you require, then release the mouse button.

 The text box will appear in the document, and you can now type in text or import a graphic into the text box.

To create a WordArt object

 Move the insertion point to the location where you want to insert a**WordArt** object.

 From the **Insert** menu, point to **Picture** and click **WordArt**
OR click on the **WordArt** icon on the **Drawing** toolbar or **WordArt**toolbar.

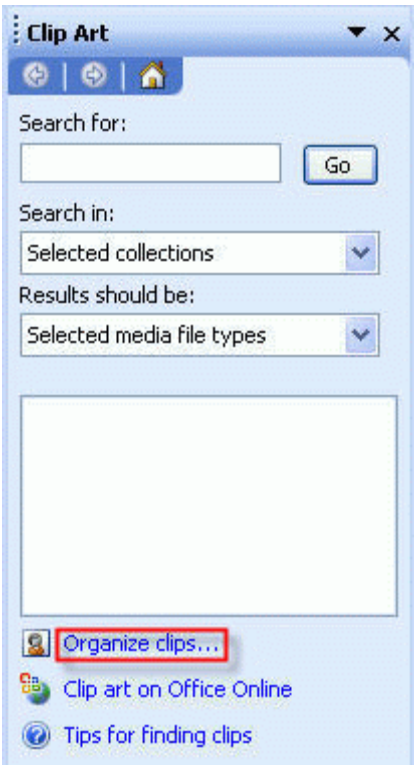
 From the **WordArt Gallery** select a style to use and click on the **OK**button
OR double-click on the intended style.

 From the **Edit WordArt Text** dialog box displayed, enter the required text in the 'Your Text Here' area.

 Click on the **OK** button to insert the **WordArt**. Tip: Right clicking on the**WordArt** will bring up a menu with a number of options. A particularly good option is **Format WordArt** that will let you format your WordArt in detail. You also can edit the **WordArt** using **WordArt** toolbar.

To insert a clipart

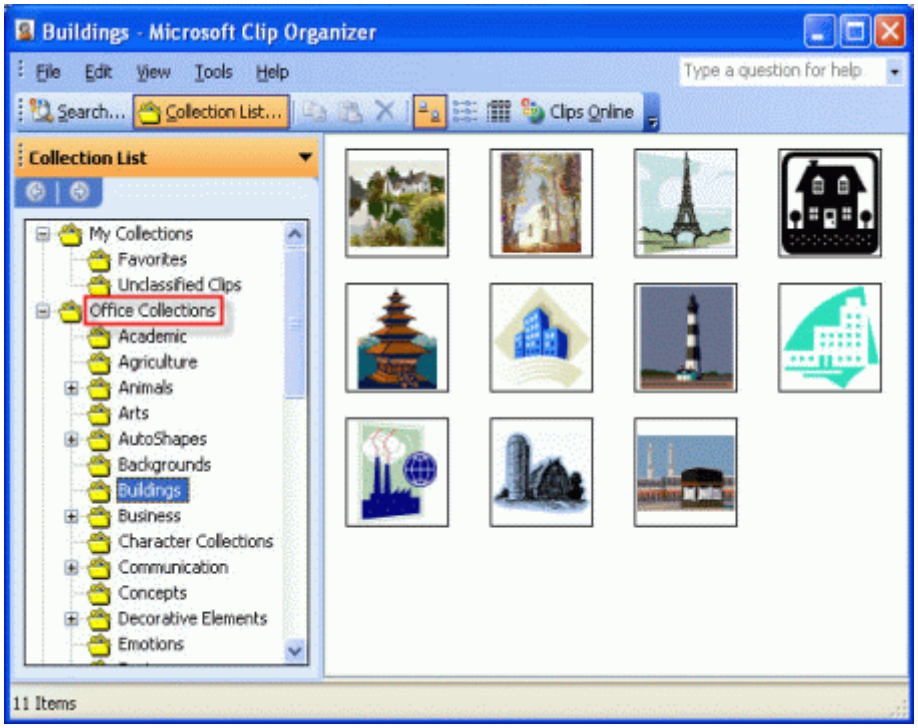
 Click on the **Insert Clip Art** icon, located on the **Drawing** toolbar to open the **Clip Art** side pane.



- The **Search for:** field allows you to enter one or more words pertaining to a specific graphic you wish to search for. Once enter, click on **Go**button to begin search. Note: Most of the time, this required Internet connection. If you do not have, then…

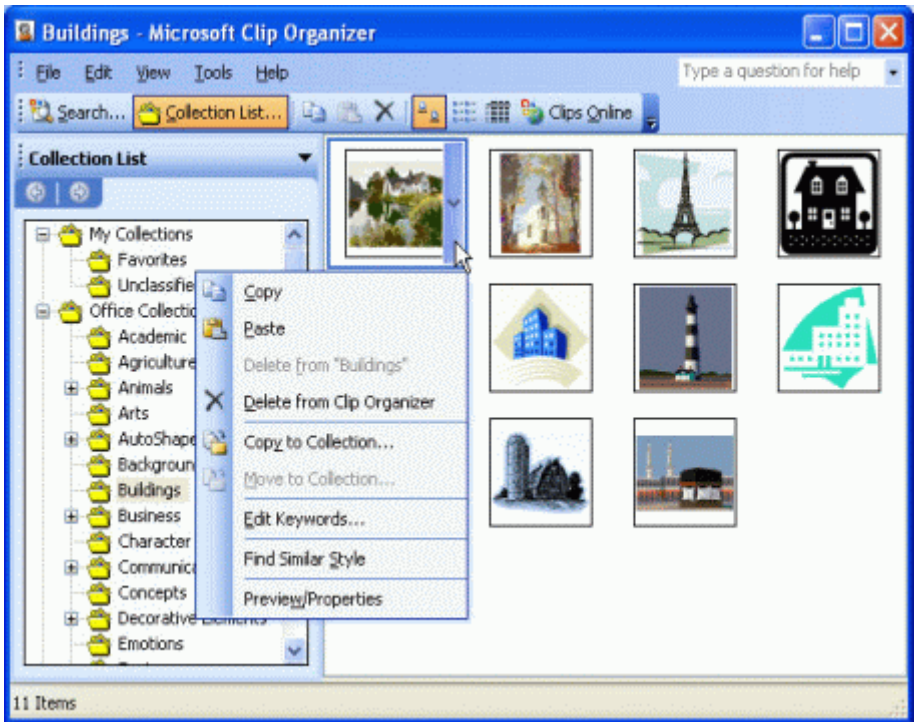
- Click on the **Organize clips…** (blue color wordings)

- From the **Microsoft Clip Organizer** window, double-click on the **Office Collections**.



As you can see, there are sub-categories such as academic, agriculture, etc. Each category has few clip arts on it.

Click on the down arrow at the right hand side of the picture and select**Copy**.



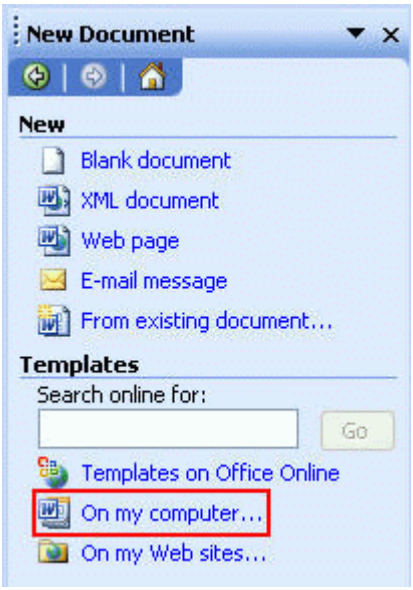
 Position your mouse cursor at the location where you wish to place theclip art. Click the **Paste** icon on the **Formatting** toolbar.

To Create A Professional Resume

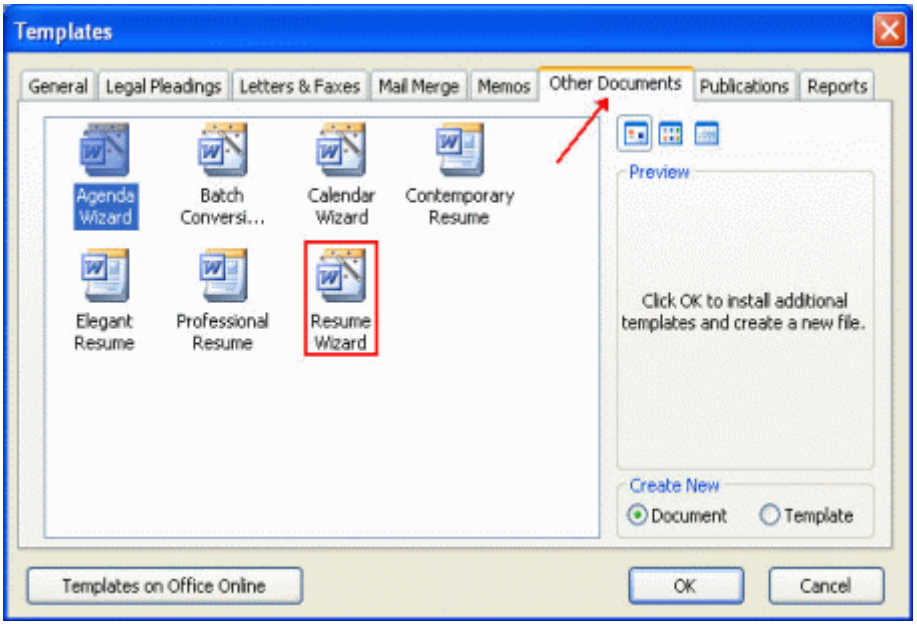
To create a resume using the Wizard

 From the **File** menu, click **New**.

 In the **New Document** task pane, under **Templates** section, click **On my computer**.

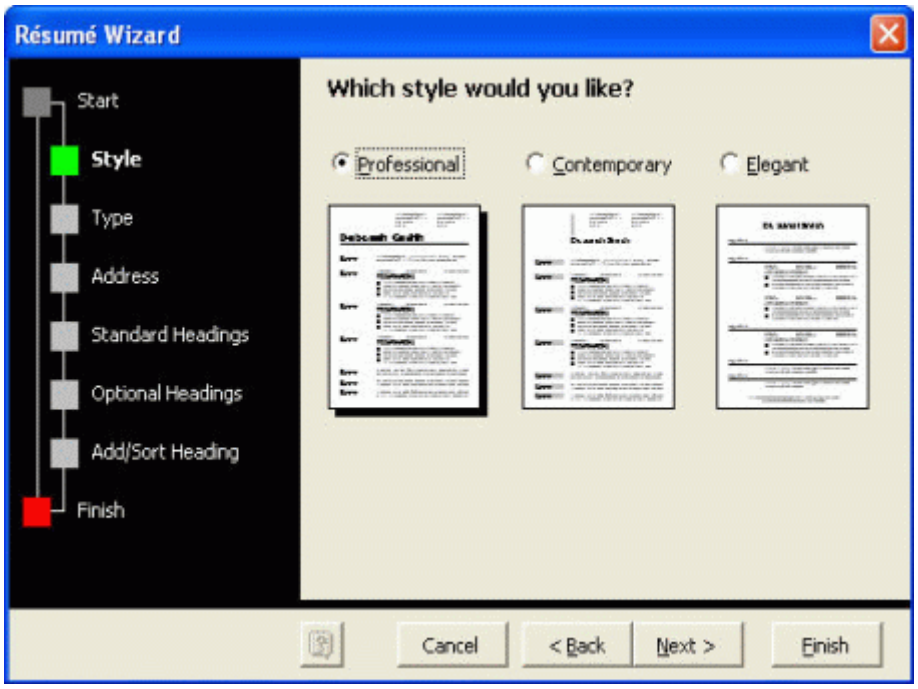


 From the **Templates** dialog box, click the **Other Documents** tab.



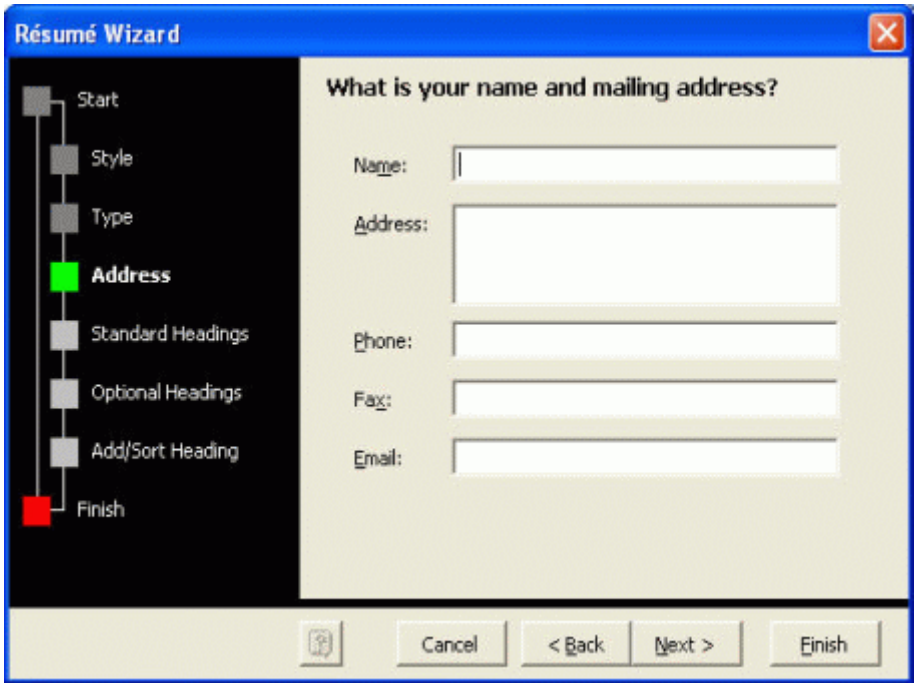
 Double-click on the **Resume Wizard**. This will start the Wizard, click**Next** to continue.

 You will see the screen below:

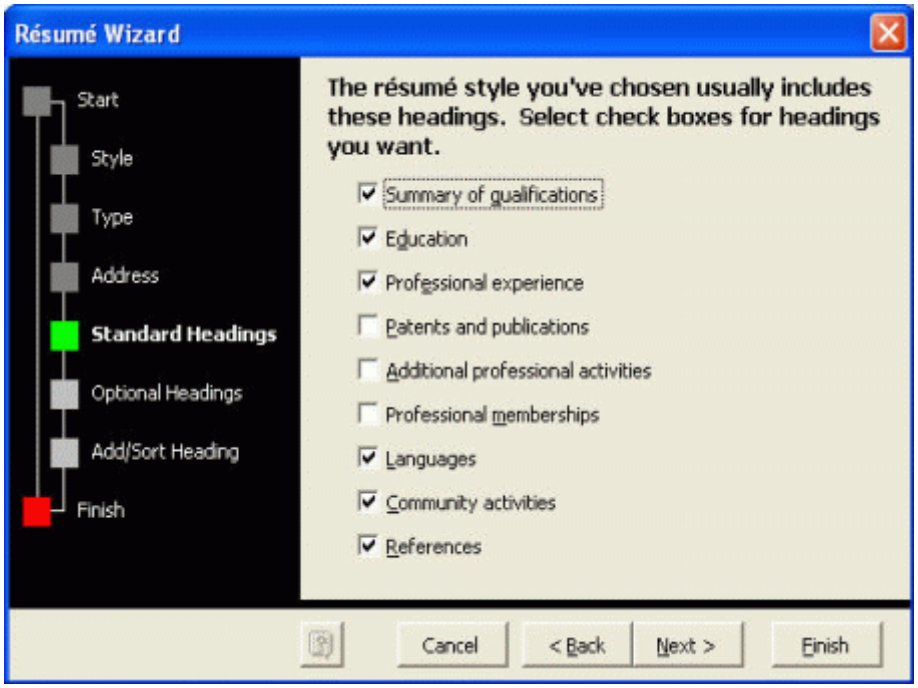


 You can style you like and click **Next**.

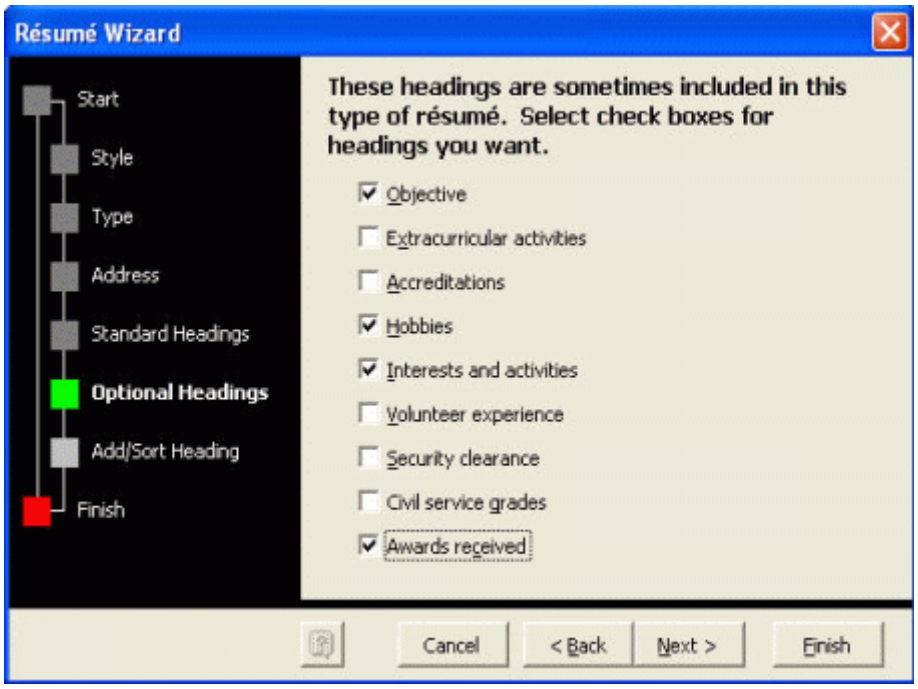
 Choose the type of resume you would like to create, maybe you can choose 'Professional' and click **Next**.



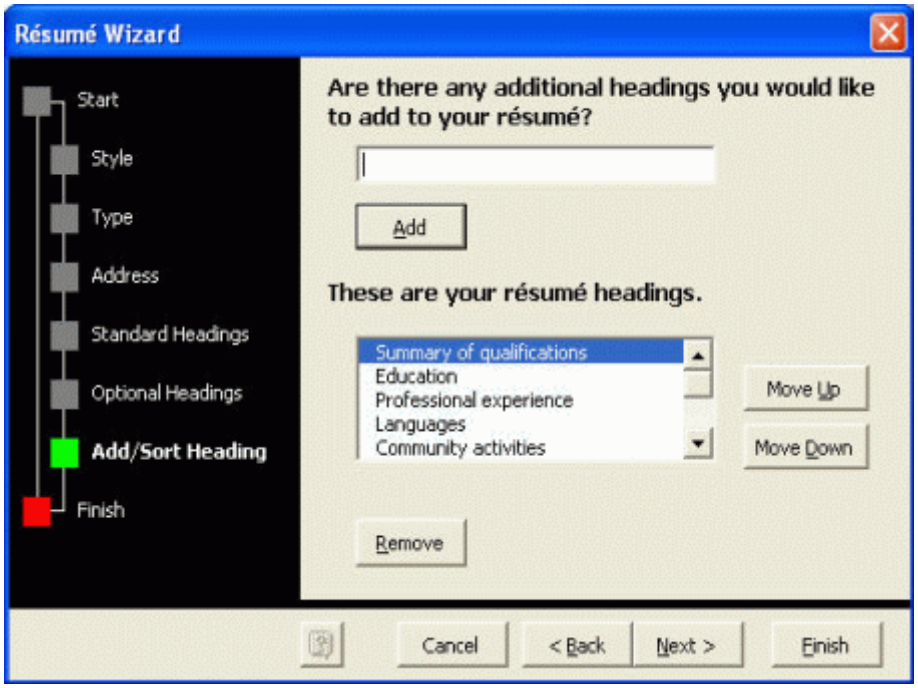
 Fill in your name and contact info before proceed by clicking **Next**button.



 Choose the resume standard headings according to your needs and qualifications. Remember, you need to fill up those particulars later as you tick. Click **Next**.



 Then, you can add some optional headings to your resume such asobjectives, hobbies, etc. Click **Next** to continue.



 You can add extra heading that is not in the wizard as needed here. You also can rearrange the headings in the page using the **Move Up** and**Move Down** buttons. Click **Next** to continue.

 To finish the wizard, click on the **Finish** button. You can see the resume headings are added to your document and you can start entering data to your resume.

Step-by-step Guides to Document Printing

Document printing is easy right? Just click on the print icon!

But before you print, Microsoft Word requires that a **printer driver** has been installed in your computer and matches the printer you are currently using. ON the printer.
The 3-step below guides you to proper document printing in Microsoft Word:

Step 1: To Preview a Document

 Place the insertion point in the page where you want the document preview to begin.

 From the **File** menu, click **Print Preview**.

 Click once in the document to view it more closely and click again to zoom back out.

 On top of the screen, you will see the **Print Preview** toolbar. Each of the toolbar icon will have their own function as describe below:

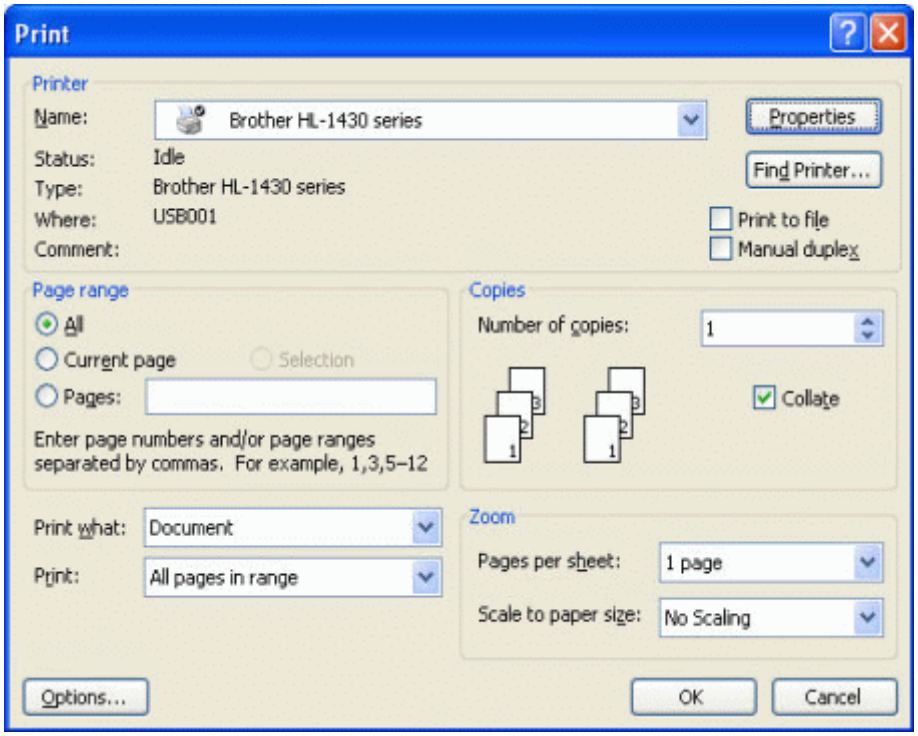
Print	The document is send to the printer.

Magnifier	The same as clicking inside the document. It gives a single-level zoom.
One Page	Single-page view.
Multiple Pages	Allows you to print preview up to six pages at a time on the screen.
Zoom Control	Allows you to control Zoom view percentages.
View Ruler	Allows you to view the ruler showing tabs and measurements.
Shrink to Fit	Enables you to fit a document that is just more than one page long into a single page.
Full screen	Allows you to change to Full Screen view.
Close	Allows you to leave Print Preview and return to the MS Word screen.

Note: The step 1 of document printing here is to let you see (preview) the document. If you satisfied, only proceed to the step 2 otherwise just make the necessary changes.

Step 2: To Change the Printer Settings

- From the **File** menu, click **Print**.
- From the **Print** dialog box displayed, you needs to do some settings as describe below:



Printer:

Name	Select the printer you wish to use from the list of installed printers.
Properties button	Important! Refer below.
Print to file	Will print the document to another file, rather than the printer.

Page range:

All	Will print all the pages of a document.
Current page	Will print the current page only.
Pages	Allows you to print a single page, a range of pages, or disconnected ranges of pages. Enter the value such as 1, 5-9, 18, 25-33.

Print what:

Document	Will print the document (normally we choose this option).
Document Properties	Will print summary information about the current document such as file size, word count, etc.
Document	Will print the document that show markup. Note: Markupfeatures can

Showingmarkup	quickly see who made changes to your document, because Word color codes changes by reviewer.
List ofmarkup	Will print the list of markup.
Styles	Will print the construction and set up of the styles for the current document.
AutoText entries	Will print the AutoText entries for the current document.
Key assignments	Will print the keystroke assignments that are used in Microsoft Word.

Print:

All pages in range	Will print all of the pages in a specified range.
Odd pages	Will print only the odd pages of a document.
Even pages	Will print only the even pages of a document.

Copies:

Number of copies	Enter the number in the box will specify the number of copies that you wish to print the document.
Collate	Will print an entire copy of a document before the next copy of it begins to print. When you select this option, MS Word creates the number of copies specified, and then sends all the copies to the printer. Printing takes longer if you choose the option.

Zoom:

Pages per sheet:	Will specify the number of pages in a sheet of paper, range from 1 page up to 16 pages.
Scale to paper size:	Specify the different types of paper size to be use.

The Properties Button

Important: You need to click on this button, as it will let you set the printing paper size, paper orientation, color or black/white printing, etc.

This is critical, as it will affect the printing output. However, different printer installed will have slightly different settings. Click **OK** when finish and return to the **Print** dialog box.

Note: The step 2 of document printing is very important as you are required to change the printer related settings so that the outputs come out will fulfill your needs.

Step 3: To Print

- To accept the printer selection and setup, and print the document click on the **OK** button.
- Before hit the **OK** button, ensure that you have put the plain papers to the printer tray.
- To return to your document without printing, choose **Cancel**.

Customizing Microsoft Word Keyboard Shortcut

Customizing Microsoft Word Keyboard Shortcut keys is easy.

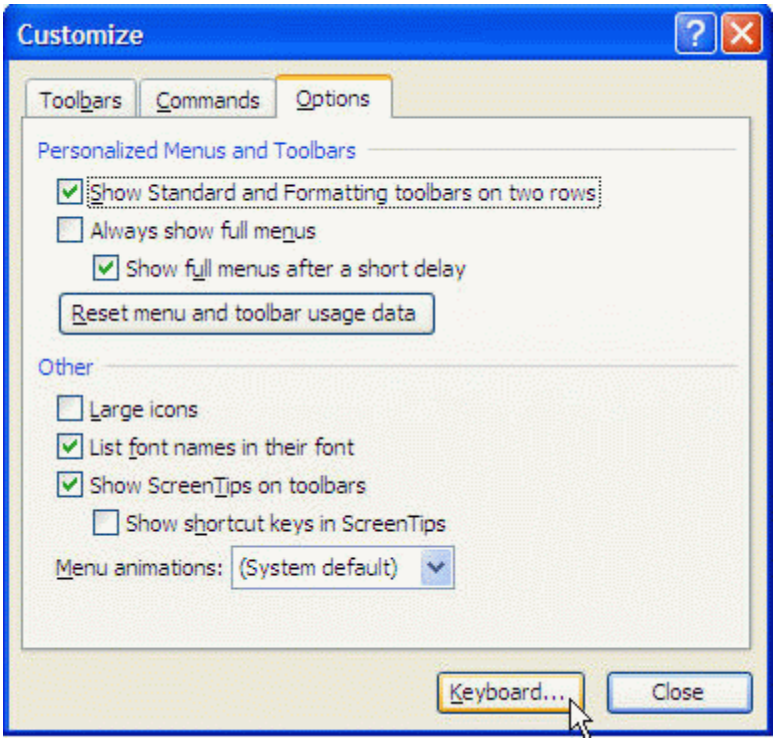
You can create customized keyboard shortcuts in any document, or any template.

When you create a shortcut, you must make sure you're putting it in the right place:

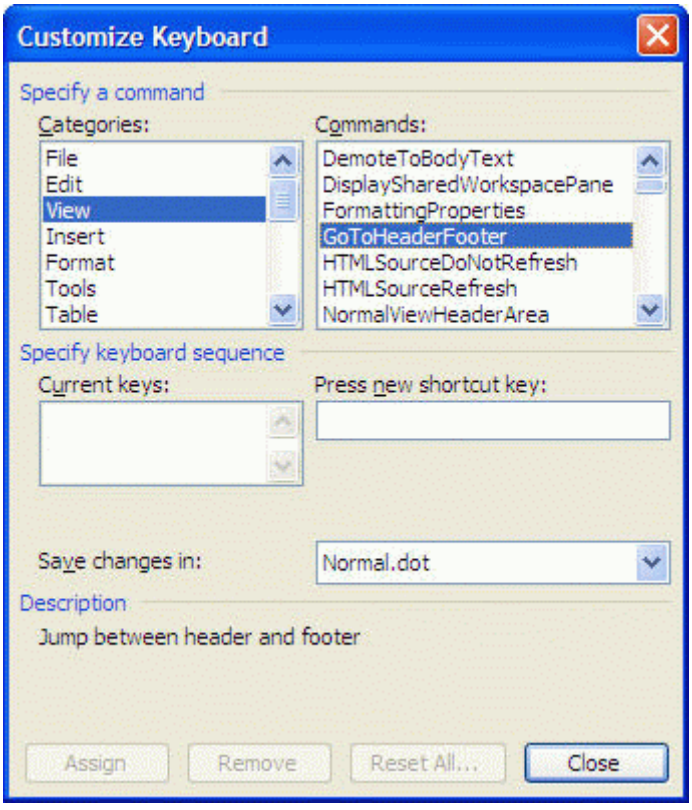
- If you want your shortcuts to be available whenever you're using Word, create them in Normal.dot. Normal.dot is a global template loaded all the time when Word is running.
- If you need a shortcut only in documents based on a particular template, create it in that template.
- If you need a shortcut only in a particular document, create it in that document.

To Create a new Microsoft Word Keyboard Shortcut

- From the **Tool** menu, click on the **Customize** button.
- From the **Customize** dialog box displayed, click on the **Keyboard**button to display the **Customize Keyboard** dialog box.



 The **Customize Keyboard** dialog box lets you assign a keyboard shortcut to almost any command, macro, font, AutoText entry, style, or common symbol.



 In the **Categories:** list box, select the category of item for which you want to create or change the keyboard shortcut. The list box to the right of the **Categories:** list box changes its name to match the category you select.

- Each of the eight menu categories (File, Edit, View, Insert, Format, Tools, Table, and Window and Help) lists the commands associated with that menu. The more commonly used commands appear on the menus, while the less-used commands don't appear. For example, the FilePrint command appears on the File menu as the Print command, but the FileConfirmConversions command doesn't appear.
- The Drawing category lists the commands associated with the Drawingtoolbar.
- The Borders category lists the commands associated with the border buttons on the Tables and Borders toolbar.
- The Mail Merge category lists the commands associated with the Tools > Letters and Mailings submenu (in Word 2003 and XP) and with the Mail Merge toolbar.
- The All Commands category lists all Word commands. Because there are so many commands, this list is awkward to use, so you'll probably want to use it only when you can't remember which menu a command is associated with.
- The Macros category lists all the macros available in the active document and templates.
- The Fonts category lists the fonts installed on Windows XP.
- The AutoText category lists the AutoText entries defined in Word.
- The Styles category lists the styles available in the active document and templates.
- The Common Symbols category lists frequently used symbols (such as dashes, ® and © marks, and paragraph marks).

 In the **Commands:** list box, select the command for which you want to create or change a keyboard shortcut. Word displays any existing keyboard shortcut for the command in the **Current Keys:** list box.

 If you wish to assign the keyboard shortcut for a specific command, key in the shortcut in the **Press new shortcut key:** text box.

Note: If this shortcut is currently assigned to another command, Word displays the Currently Assigned To line listing the command, so that you'll know which existing shortcut you're about to overwrite. Choose a different keyboard shortcut if necessary.

 Click the **Assign** button to assign the keyboard shortcut to the command.

 Click the **Close** button to close the **Customize Keyboard** dialog box.

To Remove and Reset Microsoft Word Keyboard Shortcut

 From the **Tool** menu, click on the **Customize** button.

 From the **Customize** dialog box displayed, click on the **Keyboard**button to display the **Customize Keyboard** dialog box.

- In the **Save changes in:** list box, choose which document or template you want to affect, and select the command so that Word displays the current keyboard shortcut.

- Select the shortcut in the **Current keys** list box, and then click the**Remove** button.

- To reset all keyboard shortcuts in the specified document or template to their default settings, click the **Reset All** button.

- Immediately Word will prompt a confirmation message, just click the**Yes** button.

Note: The **Reset All** button isn't available until the document or template contains customized keyboard shortcuts. After removing or resetting Microsoft Word keyboard shortcuts, save the document or template.

Microsoft Word Add-in

What is an Add-in and**Microsoft Word add-in**?

An add-in is an applicationthat can be installed to give additional functionality for the particular program. Add-ins for Word are specific to Word and cannot be used with any otherapplication.

A Word add-in has the file extension **(".dot")** and is a template that is always loaded when Word is open.

There is a lot of third party Word add-ins available for free download from websites. But remember that the more add-ins you have installed, the longer Word will take to open.

Word has several add-ins that come as standard in the following locations:

- **Word 2003** - C:-Program Files-Microsoft Office-Office11-Library

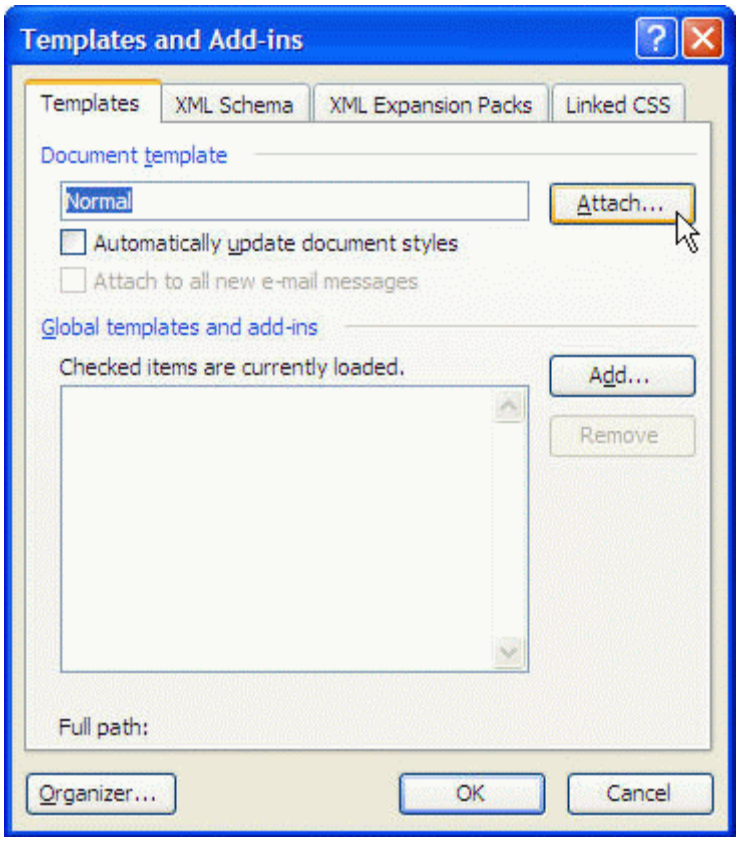
- **Word 2002** - C:-Program Files-Microsoft Office-Office10-Library

- **Word 2000** - C:-Windows-Application Data-Microsoft Addins

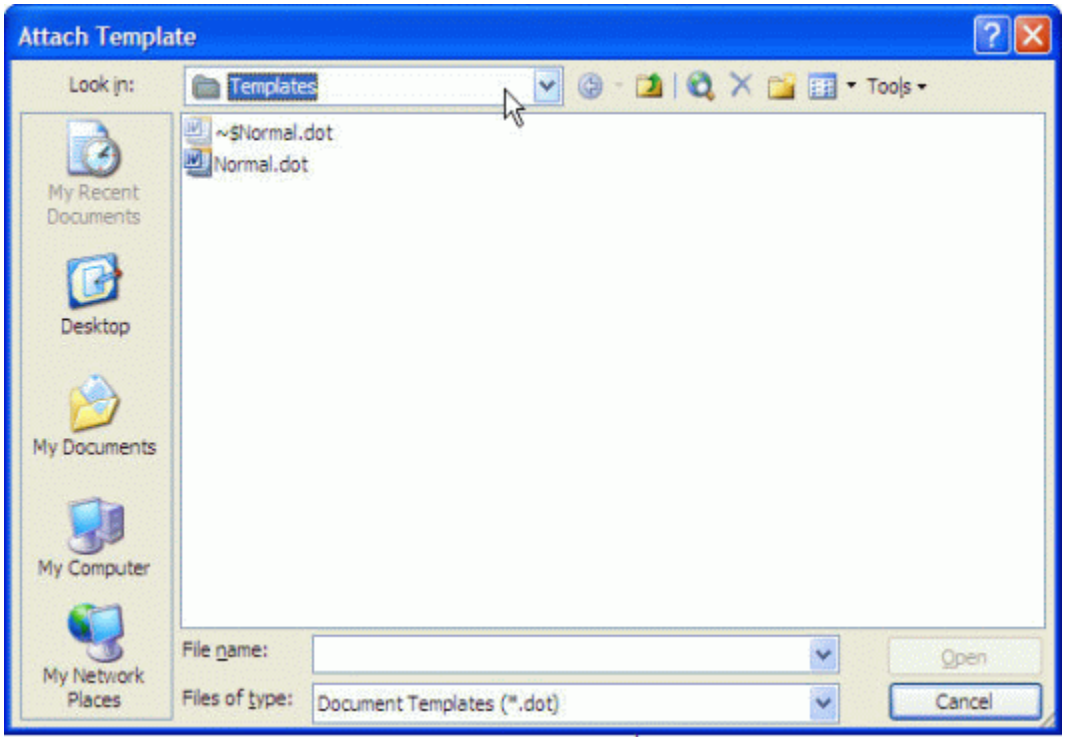
- **Word 97** - C:-Program Files-Microsoft Office-Office-Library

Installing a Word Add-in

- From the **Tools** menu, click **Templates and Add-ins**.



From the **Templates and Add-ins** dialog box, click on the **Attach** button will bring out the **Attach Template** dialog box.



 Select/browse to the appropriate template that you wish to attach and click on the **Open** button. This will attach a different template to the active document.

 Click on the **Add** button will loads a template or installed add-in program that doesn't appear in the list. If the template or add-in is listed, select the item's check box to load it.

 The **Remove** button will removes the selected template or add-in from the list.

Uninstalling the Add-in

 From the **Tools** menu, click **Templates and Add-ins**.

 From the **Templates and Add-ins** dialog box, if the add-in you want to uninstall is in the list then untick the corresponding check box.

 Click the **OK** button to uninstall the add-in.

Remove the Add-in

 From the **Tools** menu, click **Templates and Add-ins**.

 From the **Templates and Add-ins** dialog box, clear the check box that you wish to remove the particular Add-in.

 Click the **Remove** button to remove the add-in.

Note: If you remove a Word Add-in the changes are not saved until you actually close Word completely.

Hyperlink Feature

You can hyperlink documents together so that when someone read and see the link, they can click on a hyperlink and it will take them to a previous document that is referred to in the instant document.

Word hyperlinks feature makes it easy to link to from one document to the other. Also, you can prevent readers from changing the hyperlinks.

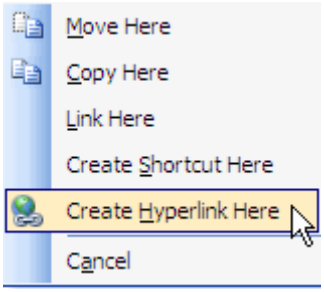
To insert Word hyperlinks in a document

 Open two Word documents.

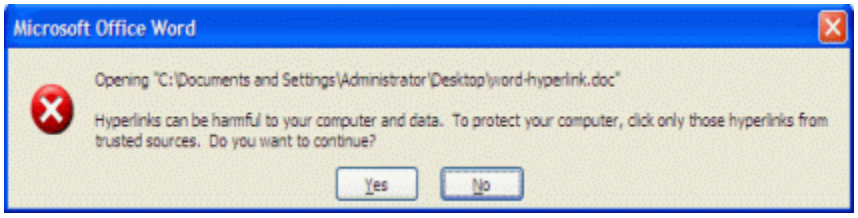
 From the **Window** menu, click **Arrange All**. You will see both documents are open in one screen.

 Select (highlight) the text term (e.g. Test) in your first document. The highlighted text will appear as a text link in another document later.

 Right-click and drag the selected text to any place of the new document that you wish to insert the hyperlink. You will see something like this:



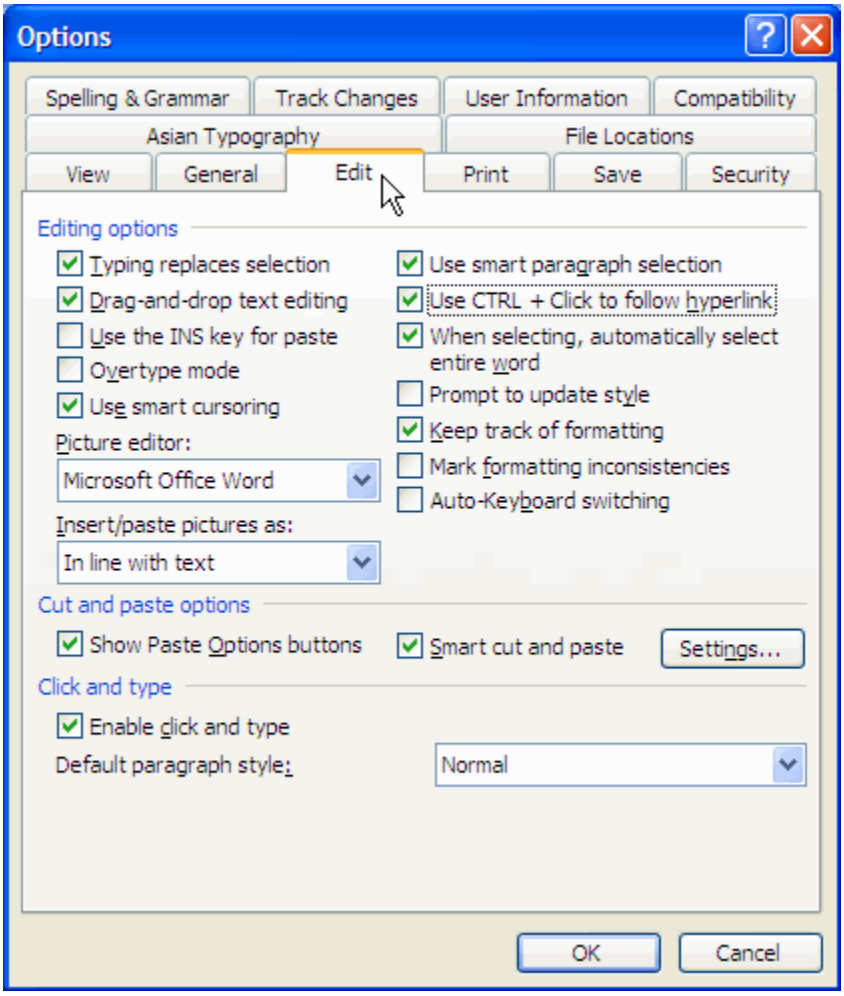
- Release the mouse button and select **Create Hyperlink Here**.
- The previously "selected word" will appear in new document as a hyperlink.
- When the mouse move to the hyperlink word, press the **Ctrl** key and then click the hyperlink word in your document.
- You will prompt a warning message as follow:



- Click on the **Yes** button will bring you to the previous Word document.

To prevent from changing Word hyperlinks

- From the **Tools** menu, click **Options.**



 From the **Options** dialog box displayed, click the **Edit** tab.

 Under **Editing options** section, clear the check mark in the "Use CTRL + Click to follow hyperlink" check box.

 Click **OK.**Now, when the reader clicks on the hyperlink, the page will link directly to the location of another page. They will have to press **Ctrl** + link to edit it.

Envelope Printing Software

printing software to help you printing the envelopes effortless in Word (see below).

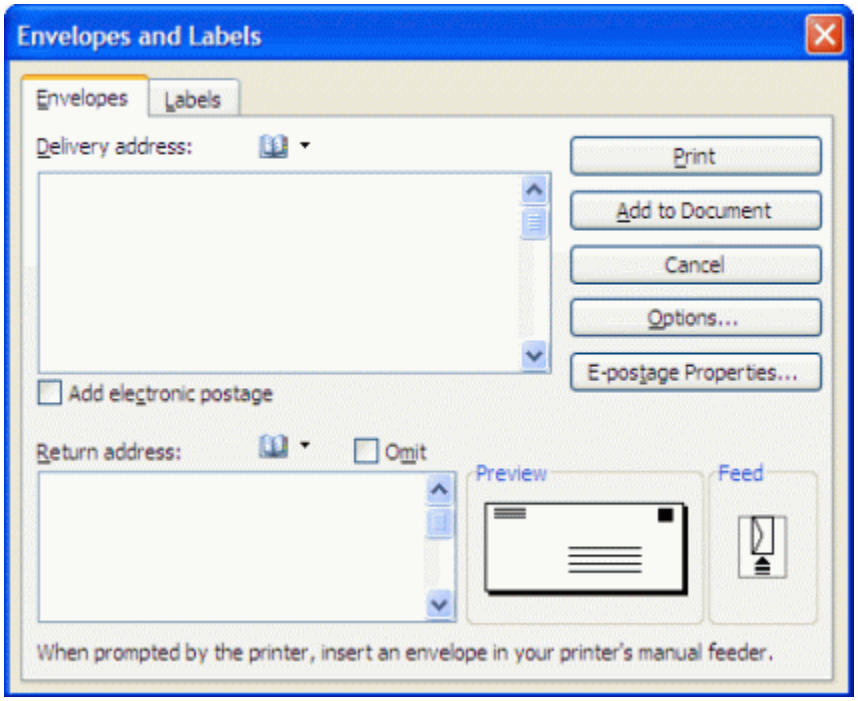
However, Microsoft Word **Envelopes and Labels** feature also can be use to print envelopes. Here is the guide:

To add information to an envelope

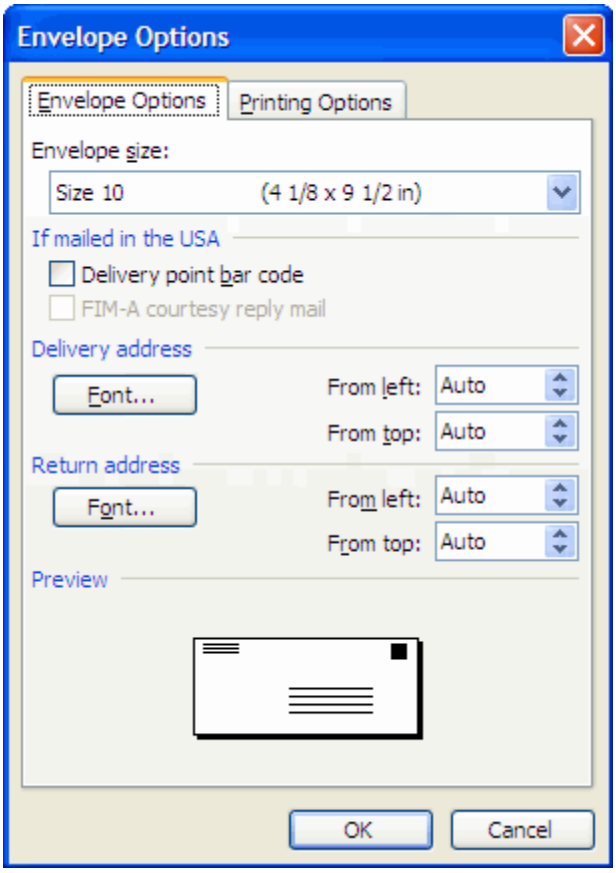
 Open a blank document in Microsoft Office Word.

 From the **Tools** menu, point to **Letters and Mailings** submenu, and click on **Envelopes and Labels.**

 From the **Envelopes and Labels** dialog box displayed, click on**Envelopes** tab, and key in the **Delivery Address** and **Return Address**column.



 Click on the **Options** button in the **Envelopes and Labels** dialog box. This will display the **Envelope Options** dialog box.



- Under the **Envelope size:** section, choose the size of your envelope.

- If you are in US, you can choose the **Delivery point bar code** option before click on the **OK** button.

- This will back to the **Envelopes and Labels** dialog box, click the **Print** button will print.

To Utilize Free Envelope Printing Software

Here are two freeware envelope printing software that makes printing envelopes effortless:

1.) Free Envelope Printing Software: Envelope Wizard

This program will guide you through the steps, necessary for using your computer and printer for addressing an envelope. At each step along the way, you be asked to provide information for addressing the envelope. You may then proceed to the next step, if you find that you have made a mistake in a previous step, you can back up and redo it.

2.) Free Envelope Printing Software: Quick Envelopes

This free software also easy to use and it covers all most commonly used envelopes.

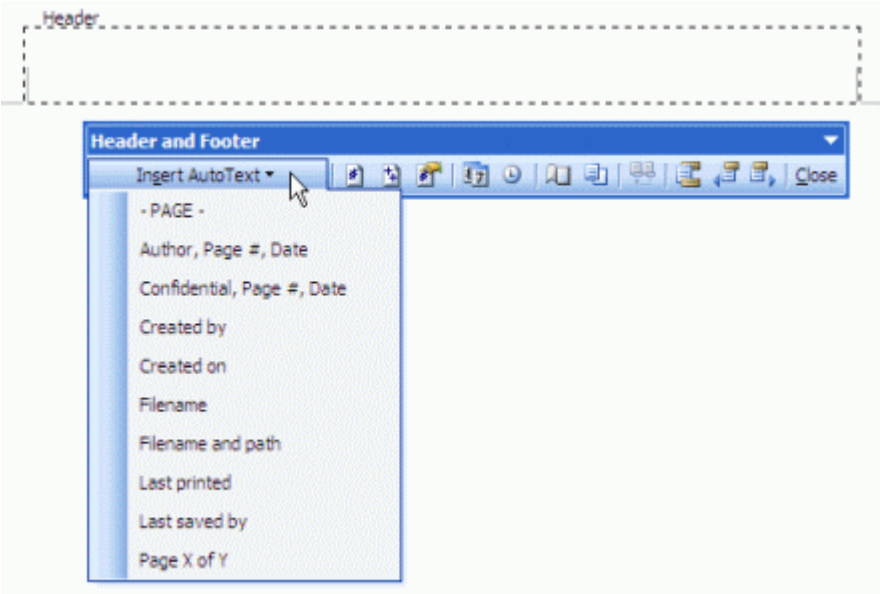
Header and Footer

Word **Header and Footer** allow you to insert information at the top or bottom of every page. This information normally consists of chapter headings, page number, etc.

You can see header and footer information on your screen when in Print Layout View and Print Preview, but not in the Normal view.

To create a header or footer

- From the **View** menu, click **Header and Footer**.
- Word changes to **Print Layout** view and the **Header and Footer**toolbar is displayed.
- Outlines of the **Header and Footer** text entry boxes appear at the top (header) and bottom (footer) of the page.



- Insert the text for the header or footer in the appropriate text entry box. You can just type any text that you like.
- You can change between header or footer by clicking on the **Switch Between Header and Footer** icon.
- You also can click on the appropriate **Header and Footer** toolbar icons to insert the page number, time, date, etc in the header or footer. The following options are available:

Icon	Function
Insert AutoText	Inserts the default auto text.
Insert Page Number	Inserts page number into the header or footer.

Insert Number of Pages	Inserts the total number of the document.
Format Page Number	Format the page number.
Insert Date	Inserts the current date.
Insert Time	Inserts the current time.
Page Setup	Opens the Page Setup dialog box.
Show/Hide Document Text	Displays or hides document text.
Same as Previous	Section header/footers should be the same as the previous section, or new.
Switch Between Header and Footer	Toggle between allowing you to edit the header and footer.
Show Previous	Shows the previous section header/footer (only useful where a document is made up of multiple sections).
Show Next	Shows the next section header/footer (only useful where a document is made up of multiple sections).

 When you have entered your header and footer text, click on the **Close**button on the **Header and Footer** toolbar.

To move text in the header or footer text entry box

 From the **View** menu, click **Header and Footer**.

 In the Header or Footer text entry box, press the **Tab** key on your keyboard to move the cursor to the middle or right hand side of the entry box.

 You also can use the Align Left, Right, Center, or Justify icons on the **Formatting** toolbar to do this.

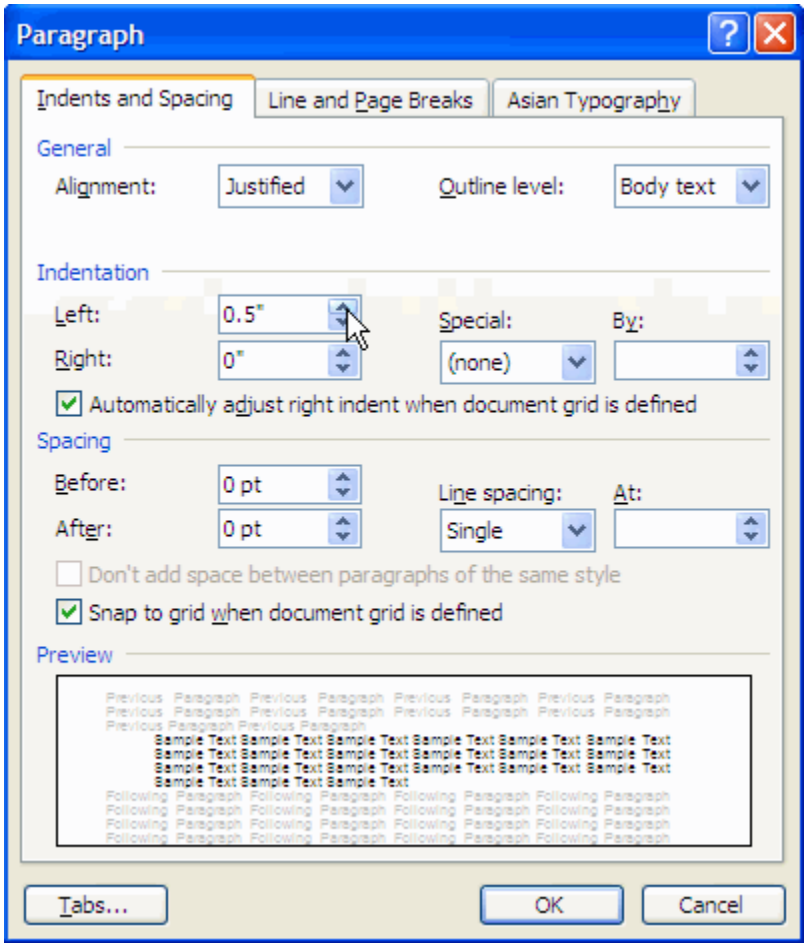
Paragraph Indent Feature

Paragraph Indent is the amount of horizontal space of the paragraph i.e. offset them to the right or left of the body text margin.

To apply the paragraph indent

- Select the paragraph you wish to indent or place the insertion point in the paragraph you wish to indent.

- From the **Format** menu, click **Paragraph**.



- From the **Paragraph** dialog box, select the **Indents and Spacing** tab (if not ready displayed).

- In the **Indentation** section, enter a positive number in the **Left:** box (try 0.5")

- Click **OK**. This will offset the entire paragraph to the right.**Note:** If you enter a positive number in the **Right:** box, this will offset the entire paragraph to the left (from the paragraph right hand side)

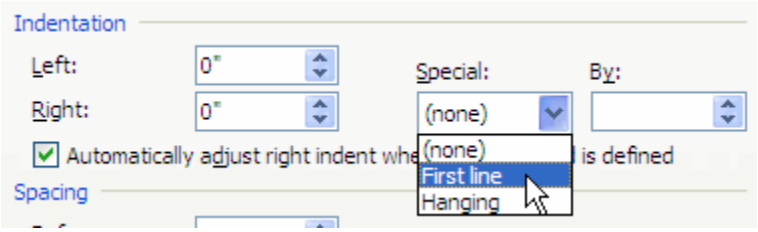
Tip: You can apply the negative indent too. Just enter the negative number to the Left: or Right: box.

To apply the first line indent

- Select the paragraph you wish to indent or place the insertion point in the paragraph you wish to indent.

- From the **Format** menu, click **Paragraph**.

- From the **Paragraph** dialog box, select the **Indents and Spacing** tab (if not ready displayed).



- In the **Indentation** section, choose **First line** from the **Special:** drop down menu.

- You can modify the range in the **By:** box, the default is 0.5".

To apply the hanging indent

- Select the paragraph you wish to indent or place the insertion point in the paragraph you wish to indent.

- From the **Format** menu, click **Paragraph**.

- From the **Paragraph** dialog box, select the **Indents and Spacing** tab (if not ready displayed).

- In the **Indentation** section, choose **Hanging** from the **Special:** drop down menu.You can modify the range in the **By:** box, the default is 0.5".

The Word Table of Contents

A Word **table of contents (TOC)** is a guide at the beginning of a document/book that tells the reader where to find sections within a document. The table of contentslists section headings and their corresponding page numbers.

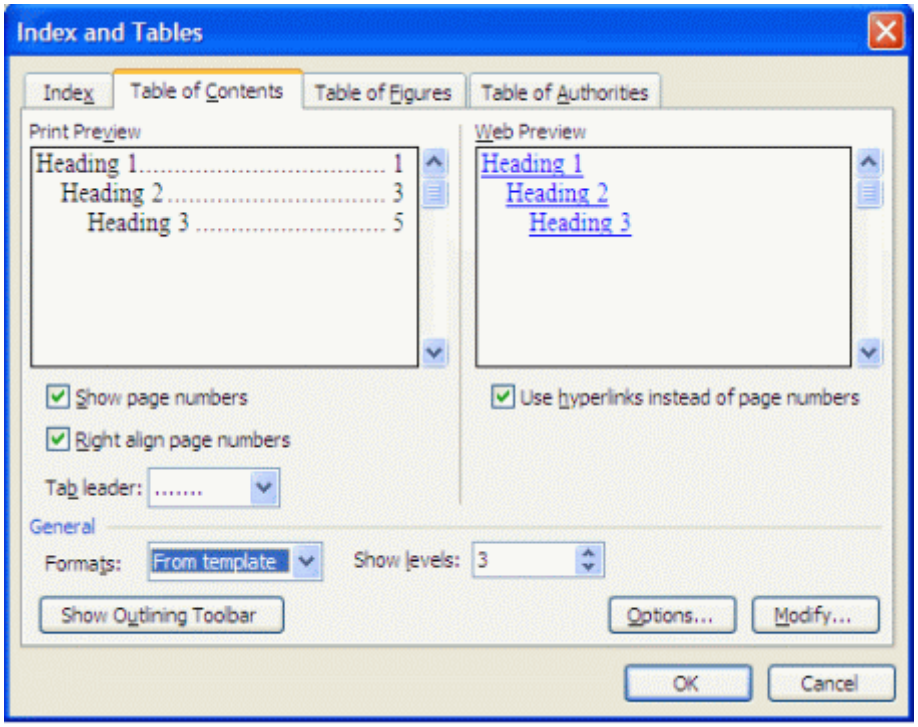
Microsoft Word has a wonderful built-in function to create atable of contents, using headings within a document or from an outline. Here we will tell you how to create a TOC using heading styles.

To create a Word Table of Contents

- Make sure your document is finished and formatted with heading styles.

- Position your cursor at the place in the document you'd like the TOC to appear.

- From the **Insert** menu, point to **Reference** and click on **Index and Tables**.



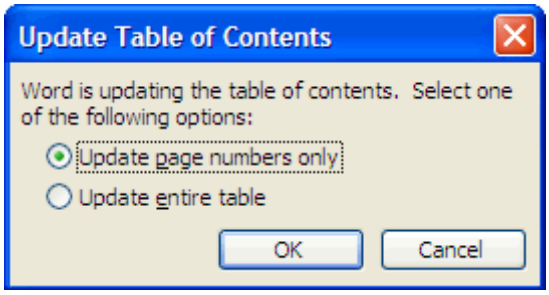
- From the **Index and Tables** dialog box displayed, click the **Table of Contents** tab.
- Under the **General** section, choose the pre-defined styles **Formats:** .
- Indicate the heading depth you would like displayed in the TOC by modifying the **Show levels:** box.
- Other options already pre-selected by default:

Show page numbers: You can show (or omit) page numbers in the TOC.
Right align page numbers: Make your page numbers right align in the TOC.

- You can modify the **Tab leader**, which controls the appearance of the space between the end of the section title and the page number in the TOC.
- Once finish, click **OK**.

To update a Table of Contents

- Right click on the area to the left (or within) the TOC and select**Update Field** from the pop-up menu. This will display the **Update Table of Contents** dialog box.



 From the **Update Table of Contents** dialog box displayed, you can choose to update page numbers only or entire table.

 Click **OK** button.

To delete a Table of Contents

 Select or highlight the entire TOC.

 Press the **Delete** key.

Word Symbol and Word Special Character

Word Symbol are character that do not appear on the computer keyboard or difficult to type using the normal keyboard.

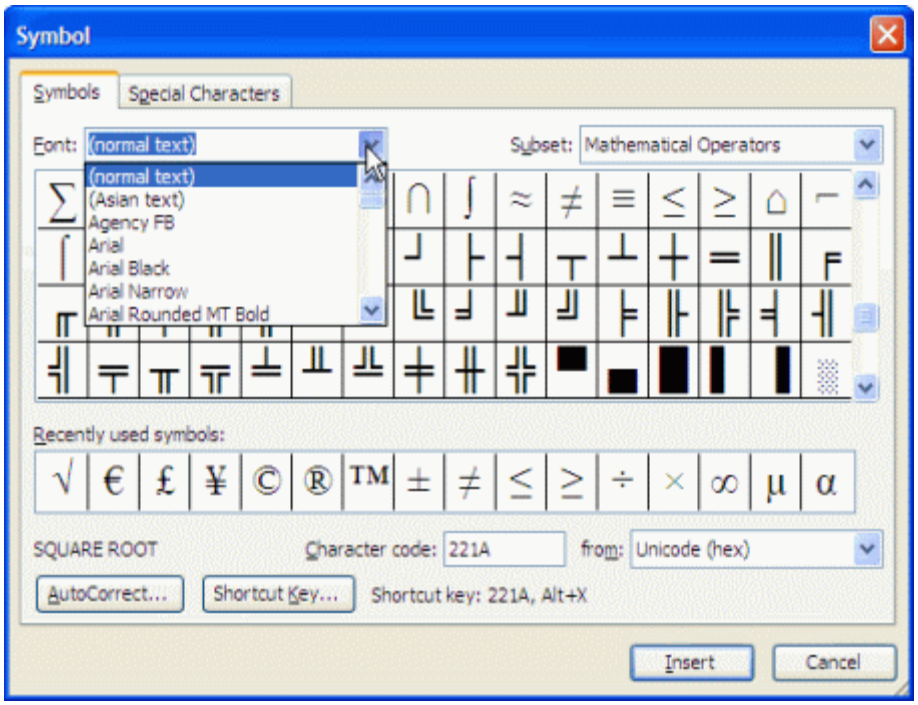
If you are looking for a special character such as the different country currency sign or the copyright or trademark symbols, here we show you how to find it.

To insert a symbol

 Click where you want to insert the symbol.

 From the **Insert** menu, click **Symbol** to open the dialog box.

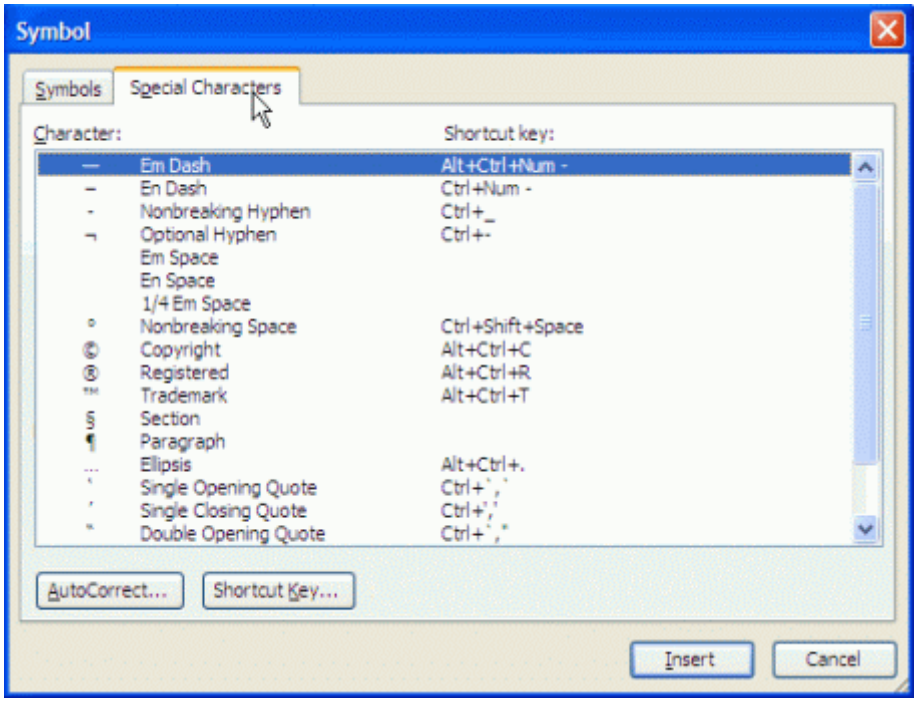
 From the **Symbol** dialog box displayed, click the **Symbol** tab.



- In the **Font:** drop-down box, click the font that you want.
- Select the symbol you want to insert and click the **Insert** button.
- Click **Close** button.

To insert a Word special characters

- Click where you want to insert the special character.
- From the **Insert** menu, click **Symbol** to open the dialog box.
- From the **Symbol** dialog box displayed, click the **Special Characters**tab.



- Select the character you want to insert and click the **Insert** button.

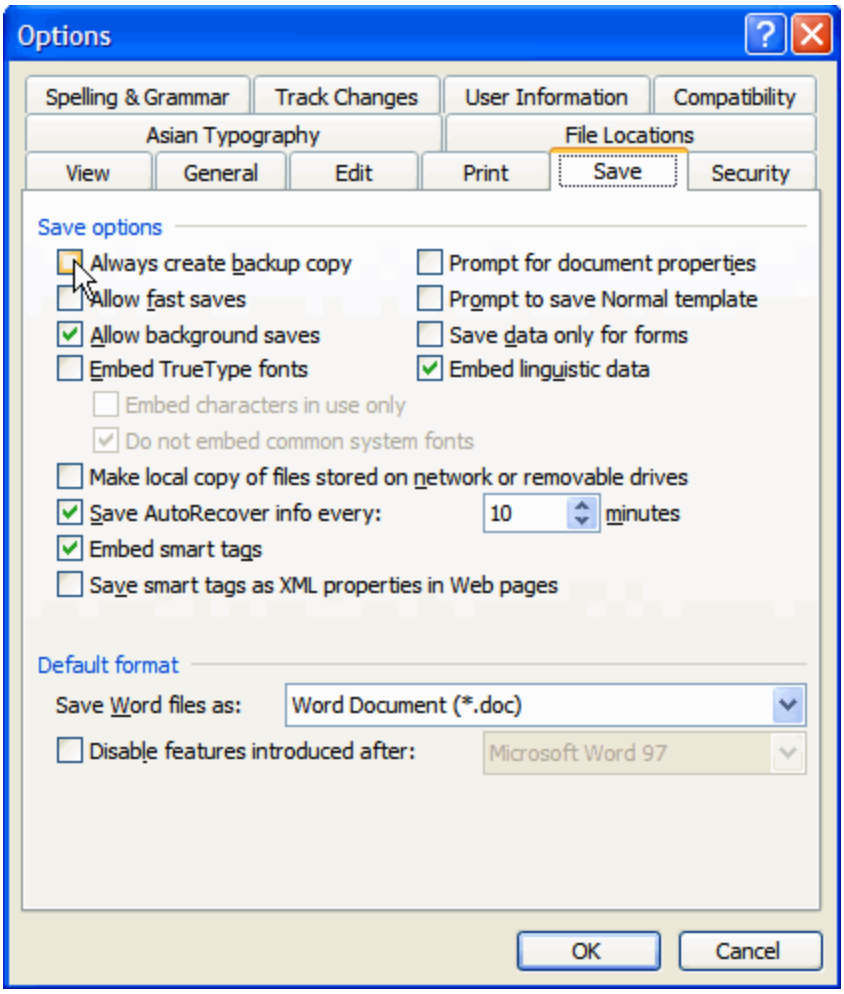
- Click **Close** button.

Word Backup – Create backups of Word documents Automatically

To create automatic backups of Word documents

- From the **Tools** menu, select **Options**.

- From the **Options** dialog box displayed, click on the **Save** tab, check the **Always create backup copy** option.



Click **OK**.

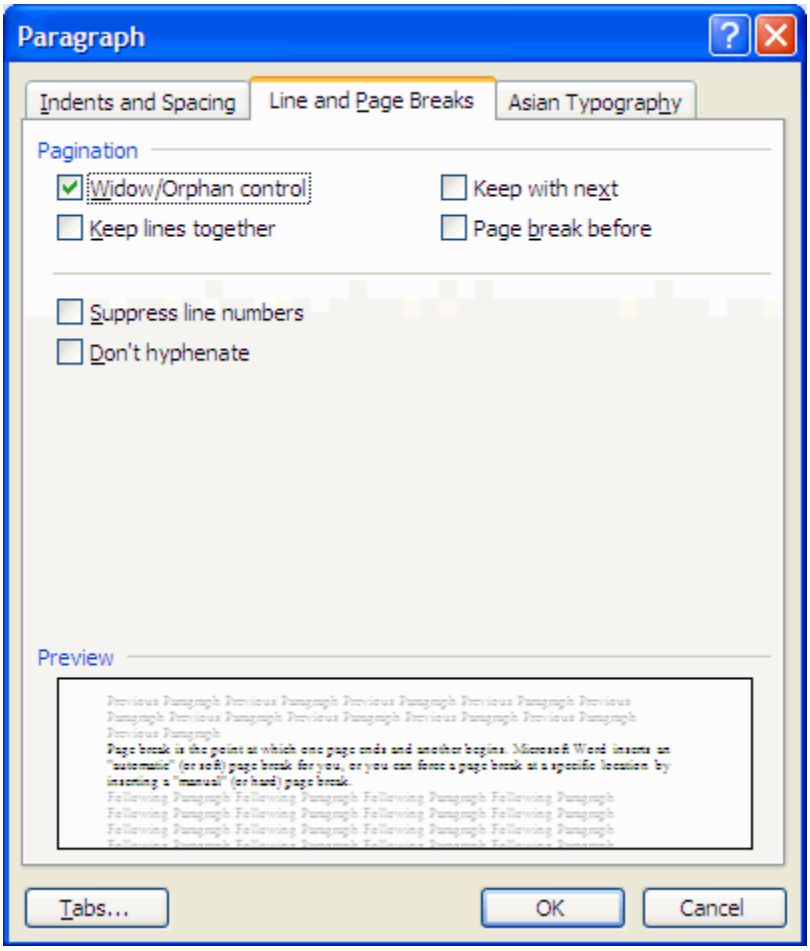
Controlling Word Page Break

Word **Page break** is the point at which one page ends and another begins. Microsoft Word inserts an "automatic" (or soft) page break for you, or you can force a page break at a specific location by inserting a "manual" (or hard) page break.

For some types ofdocuments you may want to make sure that any given paragraph appears all on one page or another. Word includes a formatting feature that allows you to ensure that paragraphs stay together without a page break in the middle of them. You can control this by setting pagination options.

To set the page break pagination options

- Select/highlight the paragraph or paragraphs that contain lines you want to keep together.
- From the **Format** menu, click **Paragraph**.



- From the **Paragraph** dialog box displayed, make sure the **Line and Page Breaks** tab is selected.

- Select the appropriate check box:

Widow/Orphan control: Control widow and orphan lines. This option is turned on by default.
Keep lines together: To keep lines of a paragraph together on a page or in a column.
Keep with next: To paragraphs together on a page or in a column.
Page break before: Always force a page break before a paragraph.

- Click on **OK** button.

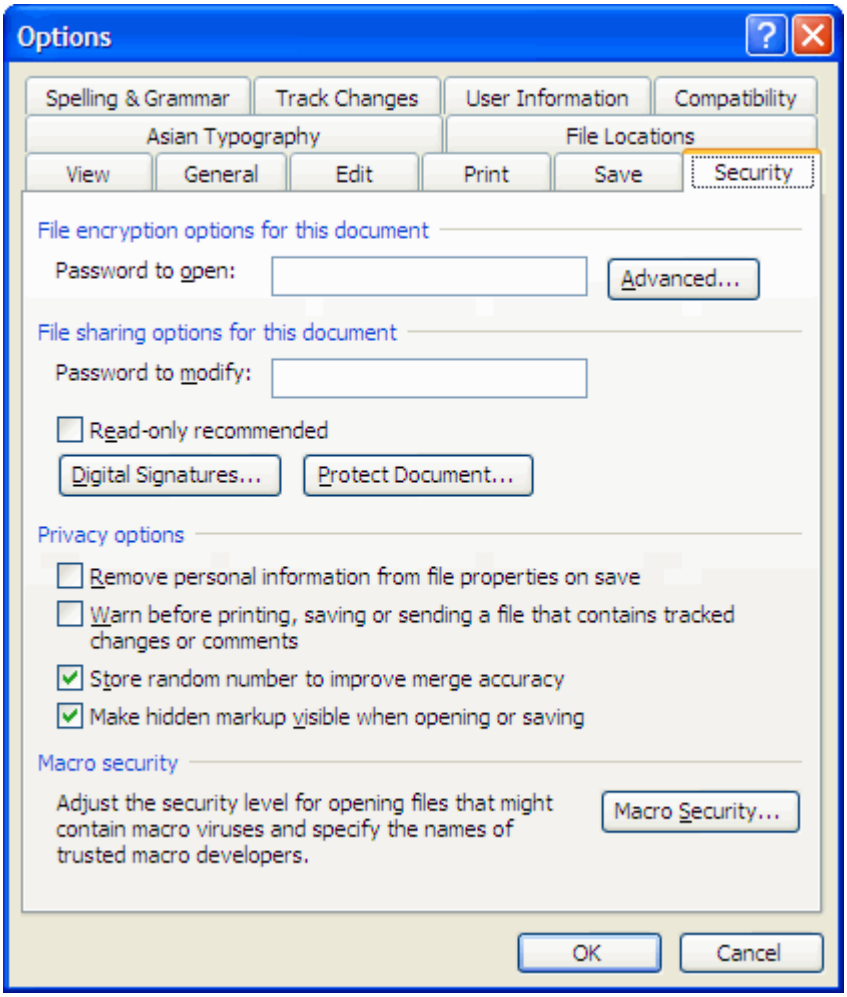
Word Password Protection

The **Word password protection** feature can be use to protect your personal document from beingopen by other people that can access to your PC.

If you share a computer with someone else or you work in a multi-user environment where it is possible for others on your network togain access to your hard drive, you may want to assign password protection to some of your documents containing sensitive information.

To assign password protection in Word

- From the **Tools** menu, click **Options**.

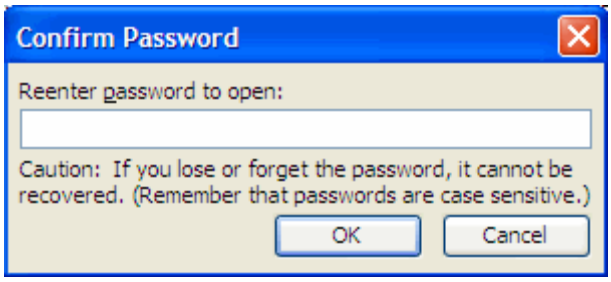


- From the **Options** dialog box displayed, click the **Security** tab

- Under the **File encryption options for this document** section enter a password in the box labeled **Password to open:**

- The **Advanced…** button opens a dialog box that allows you to specify more options, such as whether you wish to protect the document properties.

- Click **OK** will open the **Confirm Password** dialog box.



- Retype the same password again and click **OK** to save your password.
- Click **OK**.

Note: If you do not want other to modify your document, enter a password in the **Password to modify:** box under the **File sharing options for this document** section.

Word Keyboard Shortcuts for Formatting Text

1.) Display the Font dialog box
[Ctrl]+[D]
2.) Select the Font Size drop-down list
[Ctrl]+[Shift]+[P]
3.) Increase the font size in jumps
[Ctrl]+[>]
4.) Decrease the font size in jumps
[Ctrl]+[<]
5.) Increase the font size by one point
[Ctrl]+[ ]]
6.) Decrease the font size by one point
[Ctrl]+[[ ]
7.) Toggle all caps
[Ctrl]+[Shift]+[A]
8.) Toggle small caps
[Ctrl]+[Shift]+[K]
9.) Cycle the case of the selection
[Shift]+[F3]
10.) Toggle boldface
[Ctrl]+[B]
11.) Toggle underline
[Ctrl]+[U]
12.) Toggle word underline
[Ctrl]+[Shift]+[W]
13.) Toggle double underlining on the selection
[Ctrl]+[Shift]+[D]
14.) Toggle subscript
[Ctrl]+[=]

15.) Toggle superscript
[Ctrl]+[+]
16.) Toggle character and character code
[Alt]+[X]
17.) Apply the Symbol font
[Ctrl]+[Shift]+[Q]
18.) Display the Style dialog box
[Ctrl]+[Shift]+[S]
19.) AutoFormat the document
[Ctrl]+[Alt]+[K]
20.) Make the selection hidden text
[Ctrl]+[Shift]+[H]
21.) Copy the formatting of the selection
[Ctrl]+[Shift]+[C]
22.) Apply the copied formatting to the selection
[Ctrl]+[Shift]+[V]

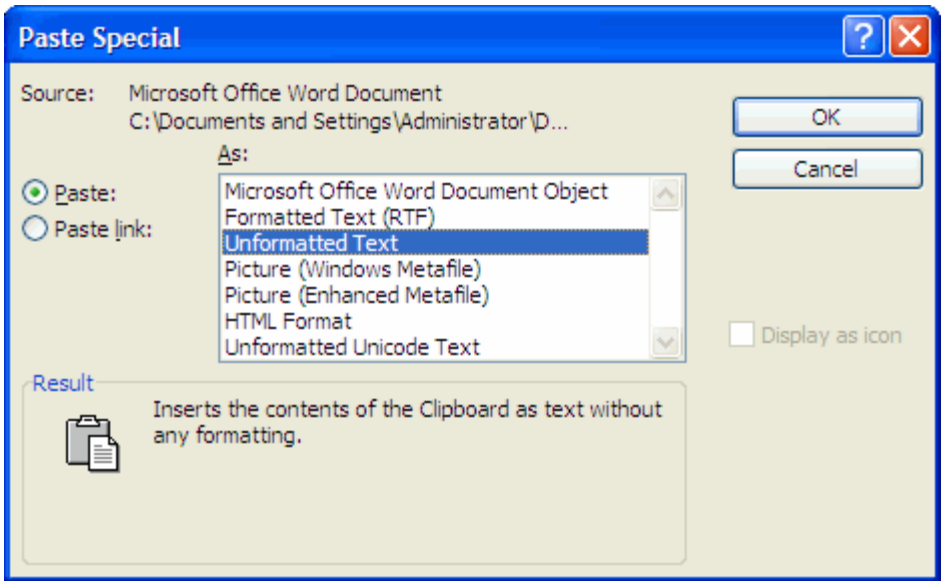
Word Paste Special

What you can do with the **Word Paste Special**? Let's see…

Word typically preserves all formatting when you copy or cut information from aWeb page or other documents and paste it into a Word document. Sometime this is good and helpful, but it can get annoying --such as when you copy the text from web that happens to be a hyperlink and Word inserts the link into your document.
There is a simple way to avoid pasting text with all that formatting using the paste special feature.

To use Paste Special to paste unformatted text

- Copy the text from other sources (i.e. Web or Word document)
- Open Microsoft Word, where you wish to paste the text.
- From the **Edit** menu, click **Paste Special**



- From the **Paste Special** dialog box displayed, select **Unformatted Text**.

- Click **OK**. You'll insert the words themselves, without all that extraneous formatting.

Email Signature: How to Create or Modify it ?

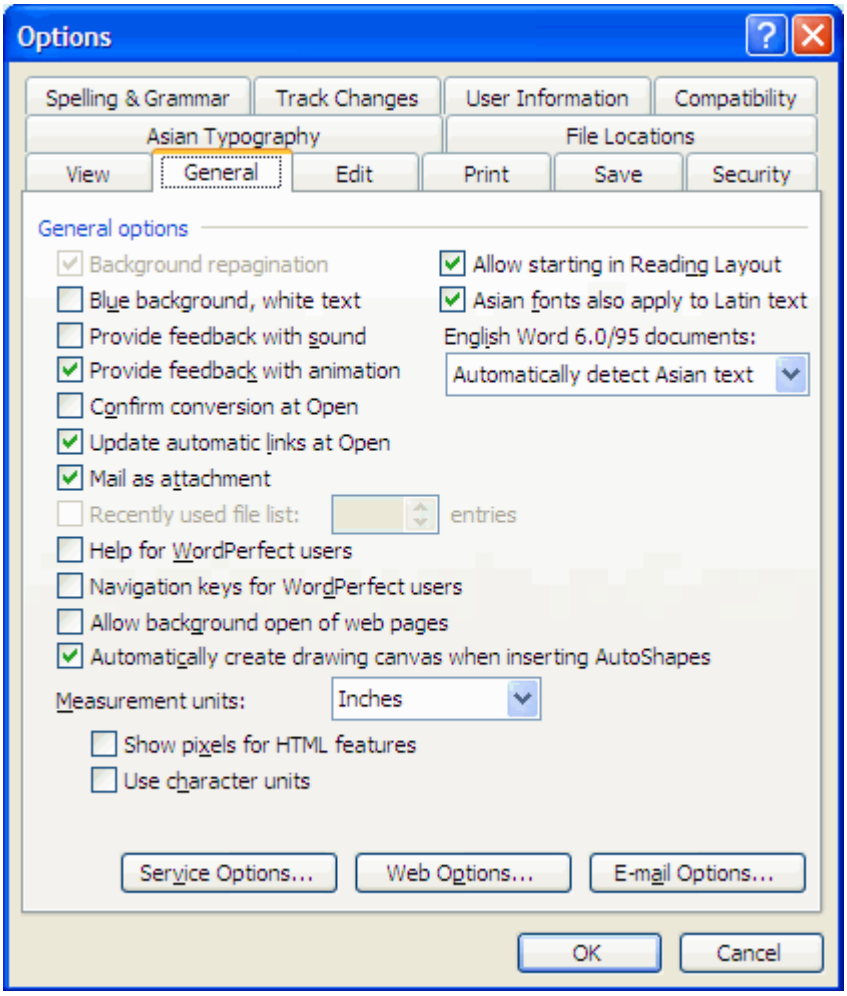
An **email signature** consists of text or pictures, or both. Microsoft Word provides the capability to email documents directly from Word. You can even use Word to create an e-mail signature file to be included with your messages.

To create an e-mail signature

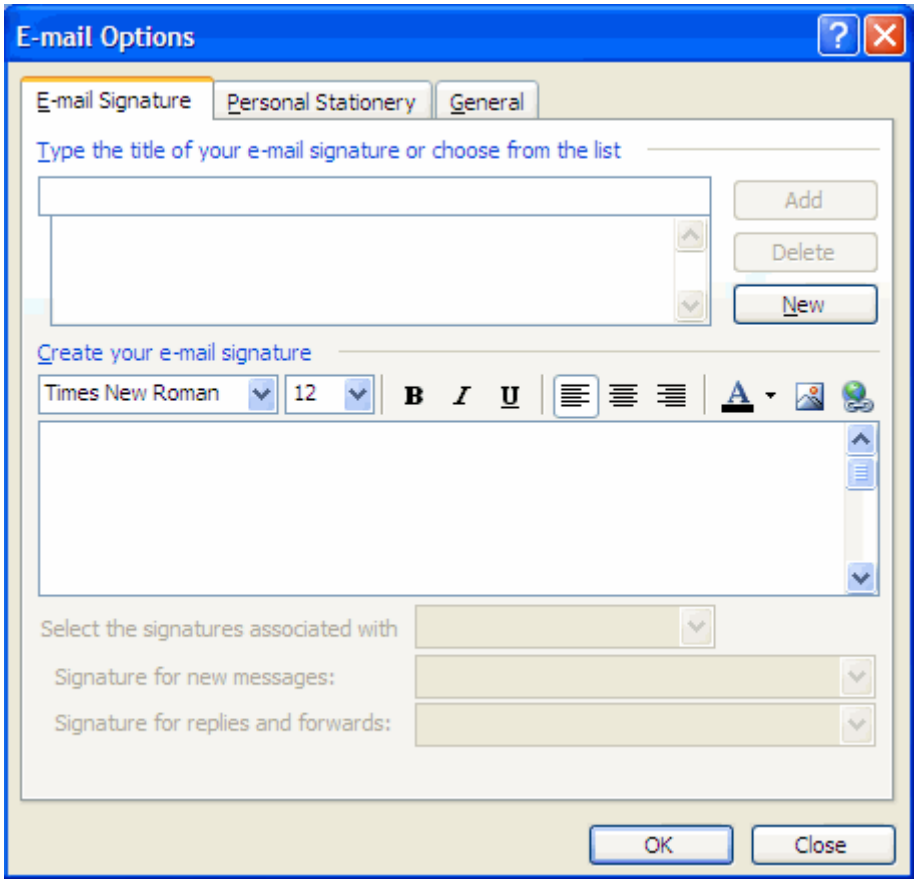
- Open Microsoft Word.

- From the **Tools** menu, click **Options**.

- From the **Options** dialog box displayed, click the **General** tab.



- Click **E-mail Options** button to display the **E-mail Options** dialog box.



- From the **Email Options** dialog box displayed, click the **E-mail Signature** tab.
- In the **Type the title of your e-mail signature or choose from the list** box, type a name for your signature.
- Under **Create your e-mail signature** box, insert the text or pictures, or both, that you want to use for a signature. (You can format the text using the available formatting tools).
- When you finish, click **OK** to close the **Email Options** dialog box.
- Click **OK**.

To modify an e-mail signature

- Open Microsoft Word.
- From the **Tools** menu, click **Options**.
- From the **Options** dialog box displayed, click the **General** tab.
- Click **E-mail Options** button to display the **E-mail Options** dialog box.
- From the **E-mail Options** dialog box displayed, click the **E-mail Signature** tab.

 In the **Type the title of your e-mail signature or choose from the list** box, click the signature you want to change.

 Under **Create your e-mail signature** box, make the necessary changes.

 Click **Replace**.

Word Document Map

A Word **Document Map**is useful when navigating a large document. It displays a list of headings in your document in a separate left hand pane of the screen. When you use this feature, Word will create a list based on its heading styles (Heading 1, Heading 2, and so on). The headings must be formatted using one of the built-in heading styles.

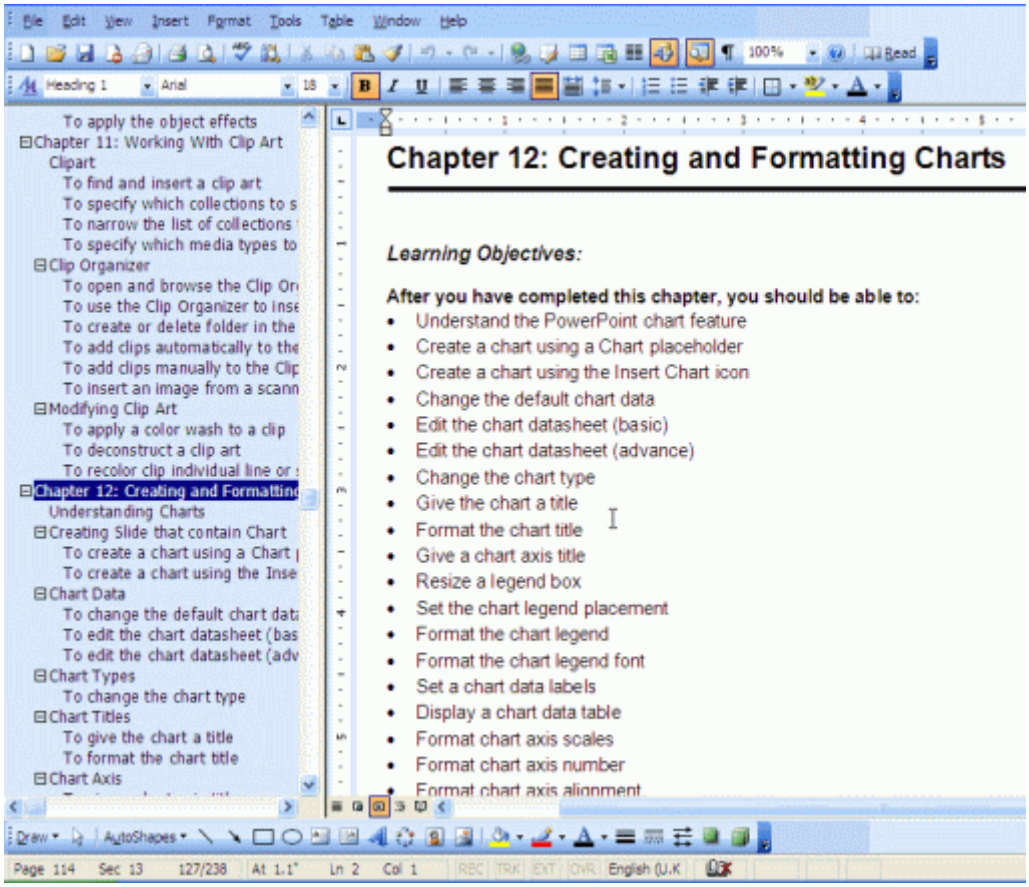
When you click on any of the headings in the map, Word will quickly jump to the corresponding heading in the document. The**Document Map** is to assist you when you are working on your document.

To enable the Document Map

Open a Word document that already being formatted using the heading styles.

 From the **View** menu, click **Document Map**.

 Here are the example:



To navigate a document with the Document Map

- Open a Word document that already being formatted using the heading styles.

- From the **View** menu, click **Document Map**.

- To display all headings at a specific level or higher, right-click a heading in the Document Map, and then click a number on the. For example, click**Show Heading 3** to display heading levels 1 through 3.

- To collapse or expand the subordinate headings under an individualheading, click the minus (-) or plus (+) sign next to the heading.

- To close, click the **Document Map** from the **View** menu again.

Modify Word normal dot template! How to prevent it?

Word's master template

There are two basic types of files used in Word, that is **.doc**, which stands for**Document**. The other is a **.dot**, which stands for **Document Template**.

When Microsoft Word starts up it loads a template file called Normal.dot and you use this template to create all documents. Else, you can use customized template you've created before to create the documents.

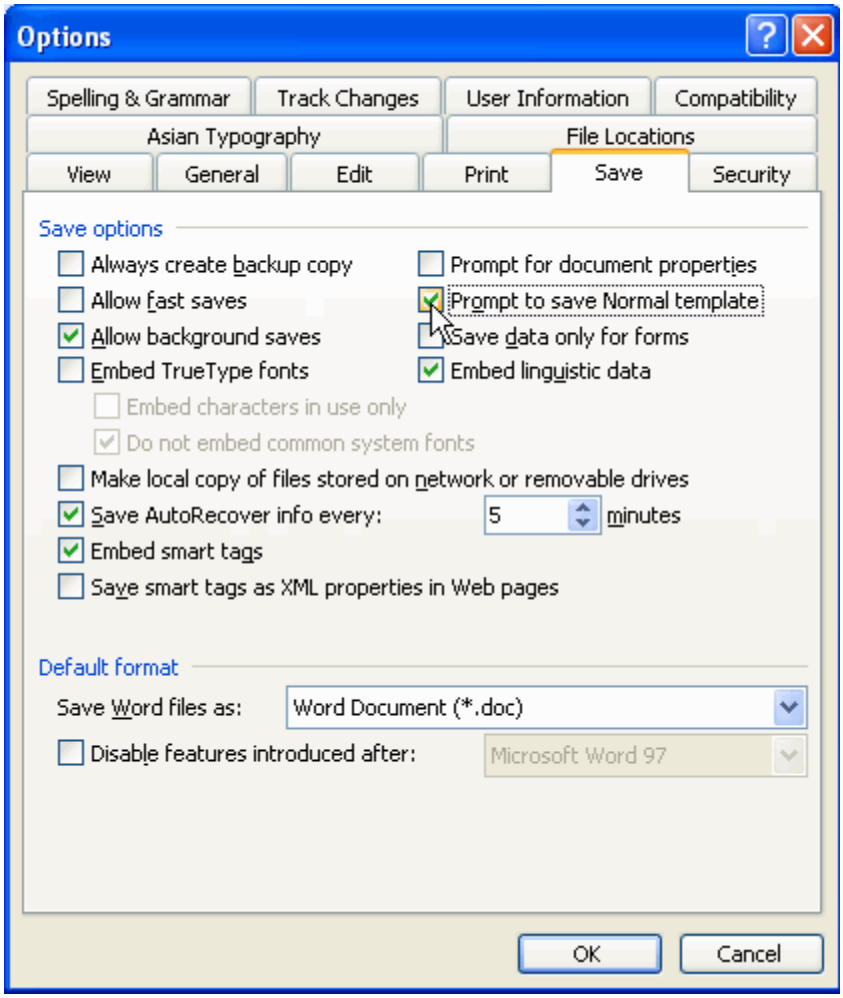
The Word Normal.dot template contains the basic layout (i.e. default font, page margins, styles, etc) and helps shape any documents created from this template. So, it's important that you need to prevent accidental keystrokes or macro viruses from changing your Word defaults normal template.

You can force Microsoft Word to ask you every time it closes whether you want to save the Normal.dot file. This way, if you know you made necessary changes to your default template you can save the file. Otherwise, you can help prevent mysterious or unintended changes by not overwriting the default template.

To prevent accidental changes to Normal.dot template

- From the **Tools** menu, click **Options**.

- From the **Options** dialog box displayed, click the **Save** tab.



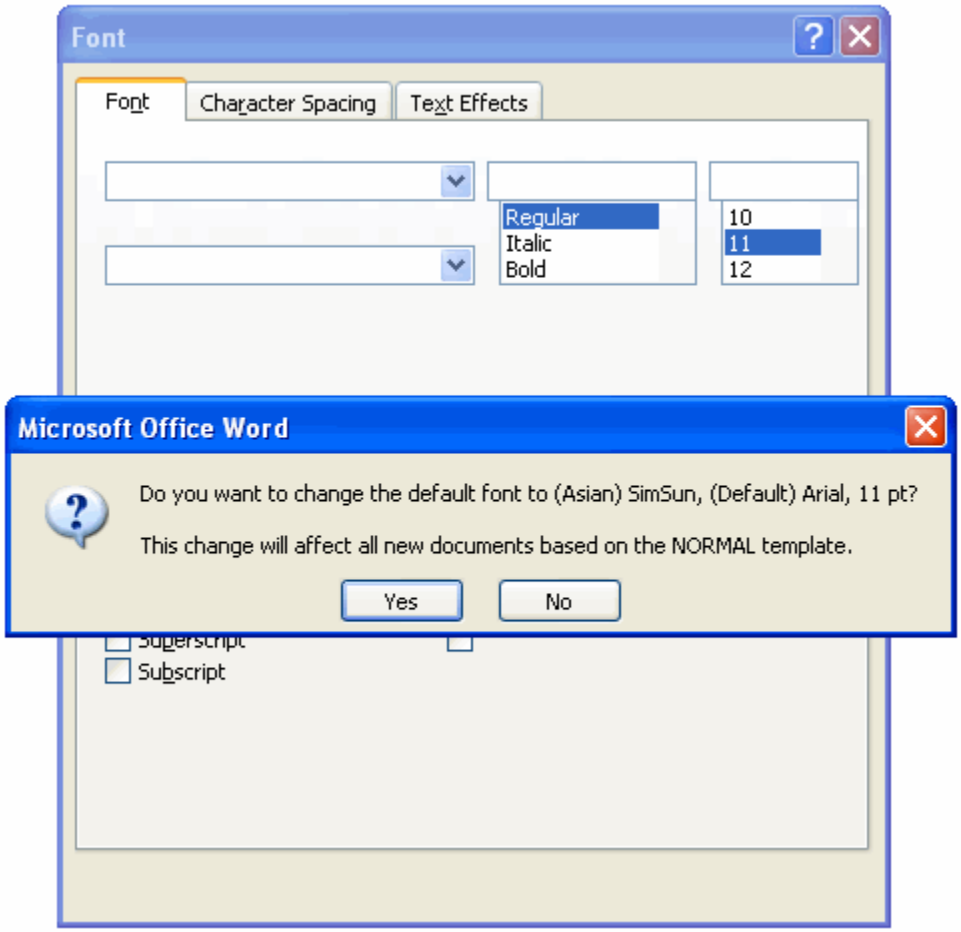
- Check **Prompt to save Normal template** option.
- Click **OK**.

A fairly common question is: "*How come every time I start a new document there's the same text already written on my page?*" That's because, somehow, the user managed to open the blank document template (Normal.dot), typed something on the page, and saved the text to the Normal.dot, as well as whatever document name they saved the file. So they've altered the master template!

To fix the problem, the user needs to reopen the Normal.dot file, remove the text and resave that master template file without the text. Then, when you open again a new Word document, the page will be empty.
However, there are some basic customizations you can do that would probably allow you to work more efficiently. If you want all your documents, or the majority of them, created in a particular font, other than the Times New Roman (the default Normal.dot font), you can change that.

To customize the Normal.dot template

- Open a new blank Word document.
- From the **Format** menu, click **Font**.
- From the **Font** dialog box displayed, change the font you prefer as your default starting font face, style, color, size, etc.
- Then, click on a **Default** button at the bottom of the dialog box. You'll be warned that this change will affect all new documents based on the Normal template.



- Click **Yes**.

Changing the Word 2003 Background Color

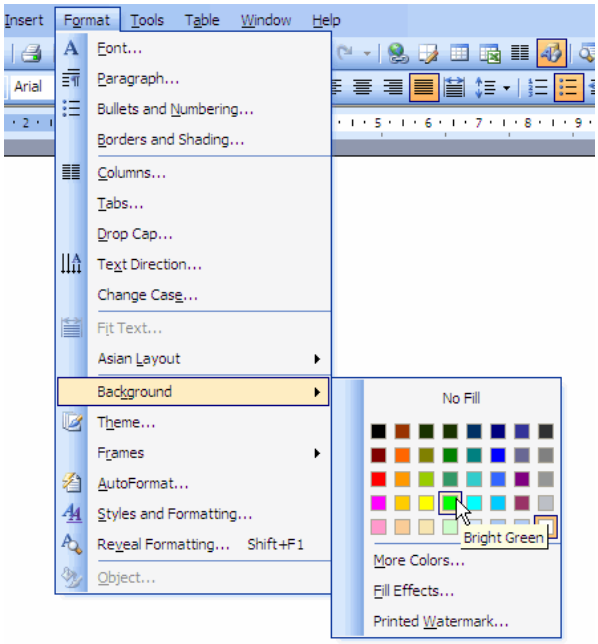
Maybe you don't know that **Word 2003Background** can be change! You can change it to any color that you like.

Why you need to create different backgrounds for your documents? These backgrounds often come in good when you are creating brochures/flyers or certificates.

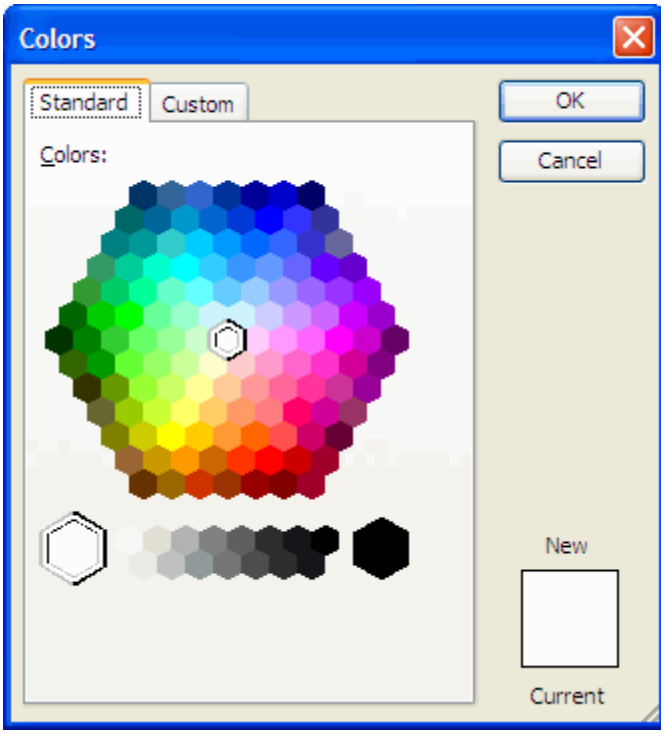
There are five types of backgrounds available in Microsoft Word 2003. They are solid color, gradient, texture, pattern, and picture. We will start with the solid color backgrounds.

To Create a Solid Color Background

- From the **Format** menu, go to **Background** and choose a color. This will be your Word background color.



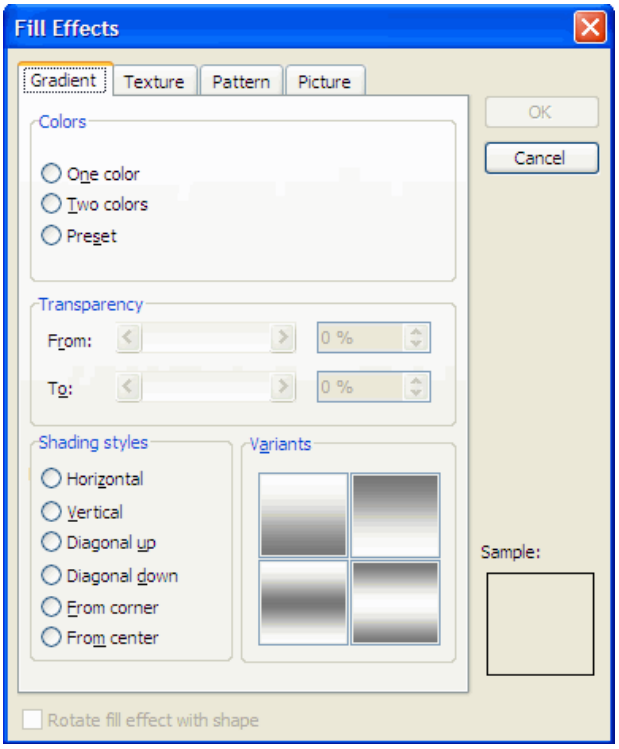
- If you don't see a color that you want to use, click the **More Colors**option.



- From the **Color** dialog box displayed, select the color that you want to use and click the **OK** button.

To Create a Gradient Background

- From the **Format** menu, go to **Background** and click the **Fill Effects** to display the **Fill Effects** dialog box.

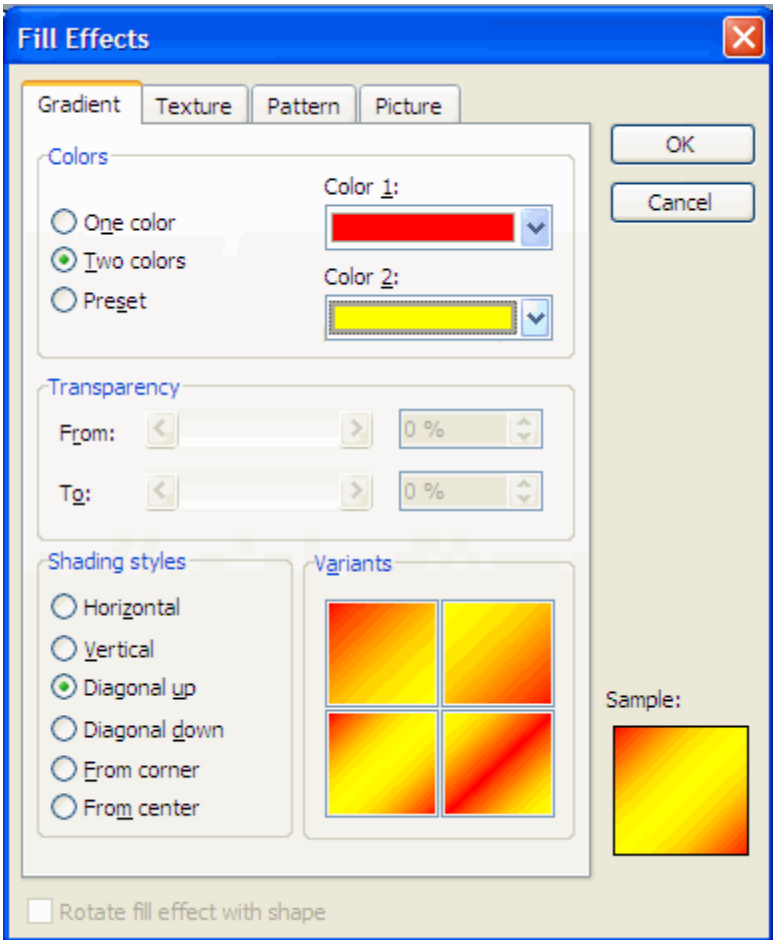


- There are 4 tabs – Gradient, Texture, Pattern and Picture that allow you to create different style of backgrounds.

- The default was in the gradient tab. You need to select what type of color you want, one color, two colors, or preset. A preset is gradient backgrounds that are already made.

- If you choose one color, select the color you want by dropping the box down on the right side of the screen.

- If you select two colors, then choose the two colors that you want to use on the right side of the screen. For example, red and yellow

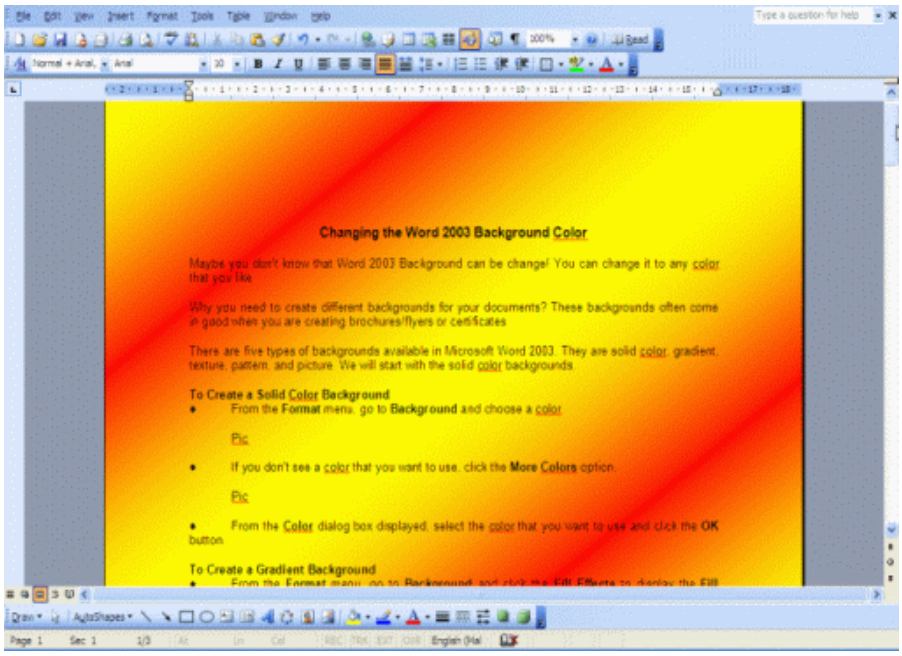


- If you want to use one of the presets, tick the presets box and go through the presets and find the one that you want to use.

- Under the **Shading styles** section, you can choose the different types of shading style to use. Here we choose the Diagonal up.

- Under the **Variants** section, select the variant that you like.

- Once you have completed, click the **OK** button. The output will be as follow.



Using Mail Merge

The Mail Merge Wizard allows you to complete the mail merge process in a variety of ways. The **best** way to learn how to use the different functions in Mail Merge is to try to develop several of the different documents—letters, labels, and envelopes—using the different types of data sources.

To use Mail Merge:

- Select **Tools** on the main menu.
- Select **Letters and Mailings** → **Mail Merge**.

The Mail Merge task pane appears and will guide you through the six main steps to complete a mail merge. You will have several decisions to make during the process. The following is an example of how to create a form letter and merge the letter with a data list.

Steps 1-3

- Choose the type of document you wish to create. In this example, select **Letters**.
- Click **Next:Starting document** to move to Step 2.
- Select **Use the current document**.
- Click **Next:Select recipients** to move to Step 3.
- Select the **Type a new list** button.
- Click **Create** to create a data source. The **New Address List** dialog box appears.

To edit a new address list:

- Click **Customize** in the dialog box. The Customize Address List dialog box appears.
- Select a field, and click **Delete**.
- Click **Yes** to confirm that you wish to delete the field.
- Continue to delete any unnecessary fields.
- Click **Rename**. The Rename Field dialog box appears.
- Enter the new name you would like to give the field in the **To:** field.
- Continue to rename any fields necessary.
- Click **OK** to close the Customize Address List dialog box.

- Enter the necessary data in the New Address List dialog box.
- Click **New Entry** to enter another record.
- Click **Close** when you have entered all of your data records.
- Enter the file name you wish to save the data list as.
- Choose the location where you wish to save the file.
- Click **Save**. The Mail Merge Recipients dialog box appears and displays all data records in the list.
- Confirm that the data list is correct, then click **OK**.
- Click **Next:Write your letter** to move to Step 4.

Steps 4-6

- Write a letter in the current Word document. Stop writing when you reach a place in the letter where you wish to enter a field from your data record.

To insert data from a data list:

- Click the **Insert Merge Fields** button. The Insert Merge fields dialog box appears.
- Select the field where you would like to insert in the document.
- Click **Insert**. Notice that a placeholder appears where information from the data record will eventually appear.
- Repeat these steps each time you need to enter information from your data record.

- Click **Next: Preview your letters** in the task pane once you have completed your letter.
- Preview the letters to make sure information from the data record appears correctly in the letter.
- Click **Next: Complete the merge**.
- Click **Print** to print the letters.
- Click **All**.
- Click **OK** in the Merge to Printer dialog box.
- Click **OK** to send the letters to the printer.

Microsoft Excel

A spreadsheet is essentially a matrix of rows and columns. Consider a sheet of paper on which horizontal and vertical lines are drawn to yield a rectangular grid. The grid namely a cell, is the result of the intersection of a row with a column. Such a structure is called a Spreadsheet. A spreadsheet package contains electronic equivalent of a pen, an eraser and large sheet of paper with vertical and horizontal lines to give rows and columns. The cursor position uniquely shown in dark mode indicates where the pen is currently pointing. We can enter text or numbers at any position on the worksheet. We can enter a formula in a cell where we want to perform a calculation and results are to be displayed. A powerful recalculation facility jumps into action each time we update the cell contents with new data. MS-Excel is the most powerful spreadsheet package brought by Microsoft. The three main components of this package are

Electronic spreadsheet

Database management

Generation of Charts.

Each workbook provides 3 worksheets with facility to increase the number of sheets. Each sheet provides 256 columns and 65536 rows to work with. Though the spreadsheet packages were originally designed for accountants, they have become popular with almost everyone working with figures. Sales executives, book-keepers, officers, students, research scholars, investors bankers etc, almost any one find some form of application for it.

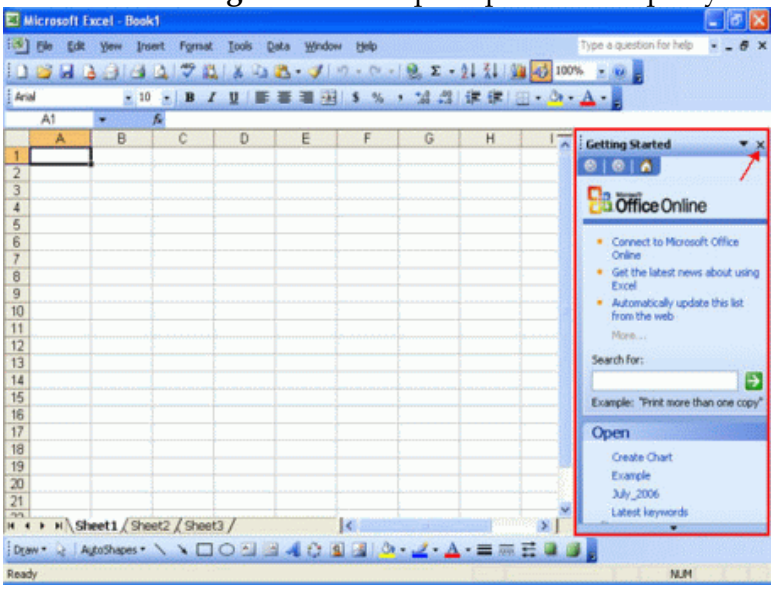
Microsoft Excel is an advanced computer-based spreadsheet, which is used to store data in columns and rows which can then be organized and/or processed. Spreadsheet is simply asheet that contains many columns and rows.

To start Excel using the Windows Start menu

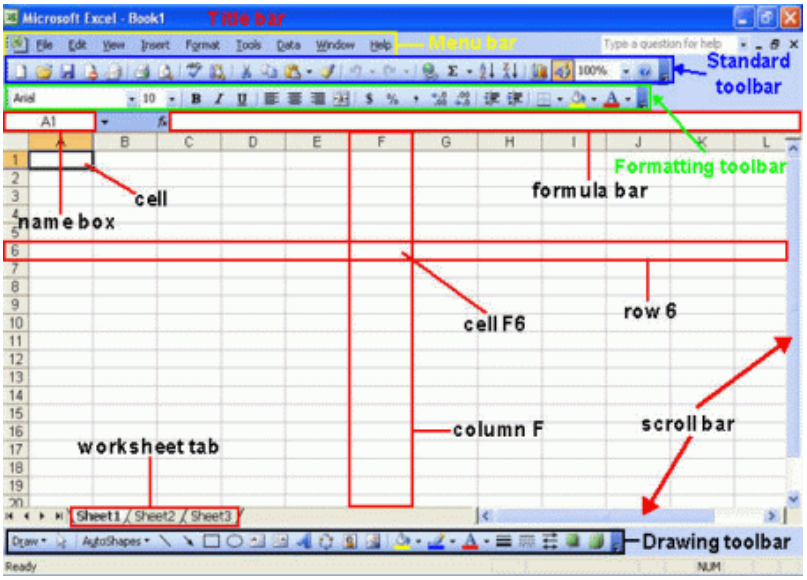
- Click on the **Start** button, point to **Programs**, following by **Microsoft Office** and click on**Microsoft Office Excel 2003**.

Note: For previous version of Office - Click on the **Start** button, point to **Programs** and click on**Microsoft Excel**.

- Immediately you will see the screen shown below. In the right hand side of the screen, the**Getting Started** task pane provides help to you.



- If you are not using it at the moment, click on the **Close** icon to close it.
- The Microsoft Office Excel 2003 screen elements:



By default, Microsoft Excel workbook contains 3 blank worksheets, which are identified by tabs displaying along the bottom of the screen.

To enter text into a worksheet

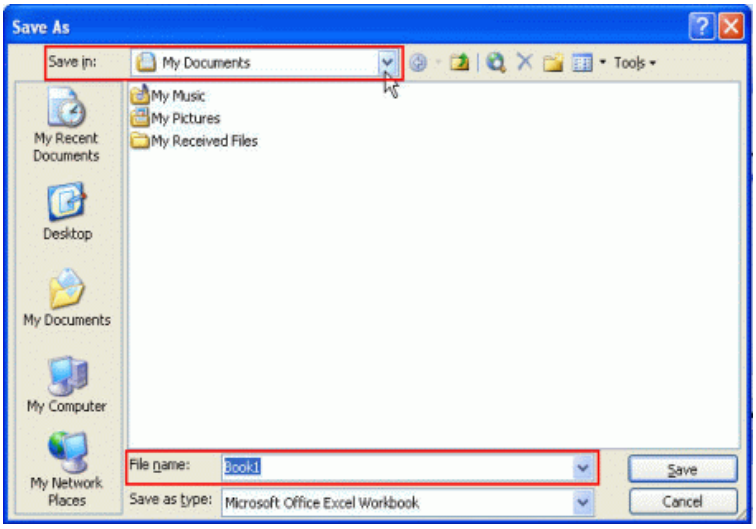
- Select the cell in which you want to enter the text and then type in the text.
- Text entries are left aligned by default.

To enter numbers into a worksheet

- Select the cell in which you want to enter a number and type in the number.
- If you want to enter a negative number, type a minus sign in front of it or enclose it in parentheses (bracket), e.g. -15 or (15).
- To indicate decimal places, you type a full stop such as 125.89.
- The numbers will be right aligned by default.

To save a workbook

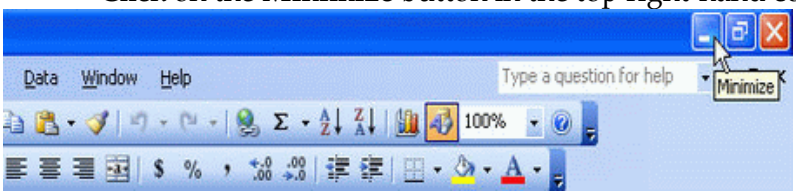
- From **File** menu, click **Save**.



- If it is a new file, the **Save As** dialog box will appear. If necessary select a different folder that you may wish to save the file in.
- Enter a name in the **File name:** text box.
- Click on the **Save** button.

To minimize a workbook window

- Click on the **Minimize** button in the top right-hand corner of the workbook window.



Note: If you minimize the window, the file is not close yet. To re-open the program, just click on the 'minimized program icon' on the window taskbar.

To close a file

- From the **File** menu, click **Close**.
- You will be asked if you wish to save any changes you have made to the file. Select **Yes** to save, or **No** to ignore the changes.
- If you are saving a new file, the **Save As** dialog box will display. In the **File name** text box, enter a name and click on the **Save** button.

To exit Microsoft Excel

- From the **File** menu, click **Exit**.
- If you have saved all the changes made in the active workbook files, Microsoft Excel will close.
- If you have not saved all the changes, the **Save** confirmation box will be displayed.

- To save the current workbook file before exiting, select **Yes**.
- To exit without saving the file, select **No**.
- To cancel the exit command, select **Cancel** or press **Esc**.

Creating and Opening Workbooks

To start using Microsoft Excel, you can start with a new blank workbookor open the existing Excel file.

To create a new default workbook

 Click on the **New** icon located on the **Standard** toolbar
OR press **Ctrl+N**

To open a file

 From the **File** menu, click **Open**.

 From the **Open** dialog box as displayed, use the **Look in:** drop down menu to select the drive or folder that contains the file you want.

 To open the file you can either double-click on the file name
OR select the file name by clicking on it, and then click on the **Open**button.

Microsoft Excel - Data Entry Techniques

Here is the guide that shows the easy ways that you can use to enter data into the worksheet.

To fill a range of cells with the same data

 Highlight the cells you wish to fill.

 Enter the information that you wish to fill the selected range with.

 Press **Ctrl+Shift+Enter** and the range will be filled.

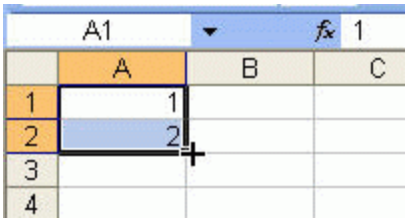
To fill a range of cells with the 'automatic' data

 Highlight the cells you wish to fill.

 Enter the data into the cells as follow: A1: 1; A2: 2

 Use the mouse to drag from cell A1 to A2.

 Place your mouse in the bottom right corner of the selected cells until you see the "+" sign appear as follow:



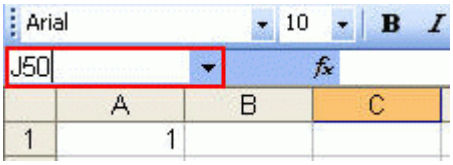
 Click and drag the mouse down the cells as you wish. You will see the selected range will fill with continuous numbers 3, 4, 5, 6,…
Note: You also can replace the above A1 and A2 cells with days of week such as Monday, Tuesday,... and months like January, February,...

Microsoft Excel - Navigating in the Worksheet

How you can move from one place to another in Microsoft Excel? Here is the ways:

To move to a particular cell (quick way)

 Enter the cell that you wish to jump to into the **Name Box** (at the top, left of the screen). In the example shown the cell reference J50 has been entered. When you press the **Enter** key you will jump to the cell you entered.



To move from cell to cell using the keyboard

 To move from cell to cell, use one of the following key or combination keys:

Icon	Function

→	One cell to the right.
←	One cell to the left.
↓	One cell down.
↑	One cell up.
Ctrl + →	To the right-hand edge of the current region.
Ctrl + ←	To the left-hand edge of the current region.
Ctrl + ↓	To the bottom edge of the current region.
Ctrl + ↑	To the top edge of the current region.
Home	To the first cell in the row.
Ctrl + Home	To the first cell in the worksheet.
Ctrl + End	To the lowest right-hand cell in the worksheet that contains a data entry.
Page Down	One screen down.
Page Up	One screen up.
Alt + Page Down	One screen to the right.
Alt + Page Up	One screen to the left.

Microsoft Excel - Selection Techniques

The selection techniques in Microsoft Excel allow you to select or highlight the cell(s) quickly so that you can perform the tasks such as deleting, copying, etc.

To select a cell

- Click on the cell you wish to select.

To select a range of cells by dragging the mouse

- Click on the first cell in the range.
- Hold down the left-hand mouse button and drag over the cells you wish to include in the selection.

To select a range of cells (making up a rectangular block)

- Click on the first cell of the rectangular block that you wish to select (i.e. the left top-left hand corner)
- Move down to the cell that marks the bottom-right corner of the rectangular block.
- Depress the **Shift** key (and keep it depress).
- Click once on the last cell of the required block and release the **Shift**key.

To select a non-contiguous range

- Select the first cell or range.
- While holding down the **Ctrl** key, select the next range of cells.

To select a row

- Click on the row heading number.

To select a column

- Click on the column heading letter.

To select an entire worksheet

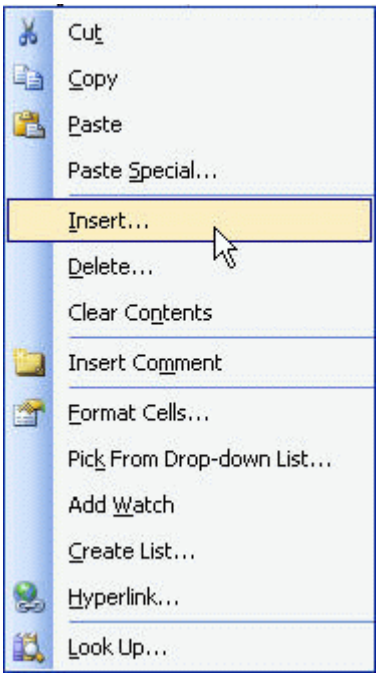
- Press **Ctrl+A**

Microsoft Excel - Inserting and Deleting

Microsoft Excel offers a convenient way for you to either insert or delete cell(s), column(s), row(s), or entire worksheet.

To insert a row(s) into a worksheet

- Select the row you want to move down when the new row is inserted above it.
- To select more than one row, drag the mouse pointer across the required row headings.
- Right-click on the selected row(s) to display a pop-up menu.
- Select **Insert**. Any existing data will move down to accommodate the new cells.



To insert column(s) into a worksheet

- Select the column you want to move to the right when the new column is inserted.
- To select more than one column, drag the mouse pointer across the required column headings.
- Right-click on the selected column(s) to display a pop-up menu.
- Select **Insert**. Any existing data will move down to accommodate the new cells.

To delete a row or column

- Use the same techniques outlined above, but select the **Delete**command from the pop-up menu.

To insert cells or range of cells

- Select the cell where you want to insert a new cell.
- From the **Insert** menu, click **Cells**.
- From the **Insert** dialog box, select one of the following options:

Entire column	Moves all cells in the column to the right and inserts a new column.
Entire row	Moves all cells in the row down and inserts a new row.
Shift cells down	Moves existing cells down and inserts one cell.
Shift cells right	Moves existing cells to the right and inserts one cell.

- Click on the **OK**.

To delete cells or ranges of cells

- Select the cell(s) you want to delete.
- From the **Edit** menu, click Delete.
- From the **Delete** dialog box displayed, select one of the options.
- Click on the **OK** button.

To insert a worksheet

- Click the sheet tab to select the worksheet where you want to insert a new one. The new worksheet will be inserted before this worksheet.
- From the **Insert** menu, click **Worksheet**.

To delete a worksheet

- Click on the sheet tab to select the worksheet you wish to delete.
- From the **Edit** menu, click **Delete Sheet**.

- Select **OK** to permanently delete the selected sheet.

Clipboard

The clipboard is an area of memory in which you can store text, graphics or any other items in it.

When you perform copy in the Excel spreadsheet, actually the copied item is store in the clipboard temporarily, and then when you paste the item, it is from the clipboard and paste the item to the intended location.

Cut, Copy and Paste Data or Objects

To use the clipboard to copy data to other program

- Select the cell or range you wish to copy.
- From the **Edit** menu, click **Copy**.

OR click on the **Copy** icon on the **Standard** toolbar.

- Switch to the required destination program (e.g. Microsoft Word).
- Place the cursor where you want the data to appear.
- From the **Edit** menu, click **Paste**.

OR click on the **Paste** icon on the **Standard** toolbar.

To use the clipboard to cut data to other program

- Select the cell or range you wish to cut.
- From the **Edit** menu, click Cut.

OR click on the **Cut** icon on the **Standard** toolbar.

- Switch to the required destination program (e.g. Microsoft Word).
- Place the cursor where you want the data to appear.
- From the **Edit** menu, click **Paste**.

OR click on the **Paste** icon on the **Standard** toolbar.

Note: You noticed that cut and paste is different from copy and paste.Cut and paste will let the original data disappear when you paste it to thedestination program/location.

To use the clipboard to copy an object between worksheet or workbook

- Click on the object (e.g. oval) to select it.
- From the **Edit** menu, click **Copy**.
- Move to a new worksheet or workbook.
- Select a location for the top left-hand corner of the object.
- From the **Edit** menu, click **Paste**.

To use the clipboard to cut an object between worksheet or workbook

- Click on the object (e.g. arrow) to select it.
- From the **Edit** menu, click **Cut**.
- Move to a new worksheet or workbook.
- Select a location for the top left-hand corner of the object.
- From the **Edit** menu, click **Paste**.

To copy a numeric value down a column

- In the first cell of the column, enter the first numeric value.
- Select the second cell in the same column and press **Ctrl+Shift+'**(Apostrophe).
- Press **Enter** to insert the value into the selected cell.

To copy a column of text into a row

- Select the range of data you wish to copy and transpose.
- From the **Edit** menu, click **Copy**.
- Highlight the cell where you want to place the range.
- From the **Edit** menu, click **Paste Special**.
- From the **Paste Special** dialog box displayed, tick the **Transpose**check box.

- Select **OK**.

The Excel Formatting Toolbar

Excel **formatting toolbar** normally located near to the top of your screen as shown here. The toolbar icons have a specific purpose that can change the outlook of your spreadsheet when you apply formatting to it.

The formatting toolbar icons and functions:

- **Font –** to select fonts from a drop-down list.
- **Font Size –** to select a font size from a drop-down list.
- **Bold –** to apply bold to a selected range.
- **Italic –** to apply italic to a selected range.
- **Underline –** to underline a selected range.
- **Align Left –** to align a selected range to the left.
- **Center –** to center a selected range
- **Align Right –** to align a selected range to the right.
- **Merge and Center –** to merge cells and center text across a selected range.
- **Currency Style –** to apply currency style to a selected range.
- **Percent Style –** to apply percentage style to a selected range.
- **Comma Style –** to apply comma style to a selected range.
- **Increase Decimal –** to decrease the number of decimal points displayed in a selected range.
- **Decrease Decimal –** to increase the number of decimal points displayed in a selected range.
- **Decrease Indent –** to decrease the level of indentation in a selected range.
- **Increase Indent –** to increase the level of indentation in a selected range.
- **Borders –** to select and apply borders to a selected range.

Fill Color – to select and apply color to a selected range.

Font Color – to select and apply color to text in a selected range.

The Excel Formatting - Fonts

To change the font used in a cell or range of cells

- Select the cell or range of cells you wish to change.
- On the Excel **Formatting toolbar** choose a font from the **Font** drop down list.

To change other font characteristics

- Select the cell or range you wish to change.
- From the **Format** menu, click **Cells**.
- From the **Format Cells** dialog box displayed, select the Font tab to change the **Font, font style**, or **size**.
- Select the **Underline:** drop down list box to select a style of underline or None to remove the underlining.
- Select the **Color:** drop down list box to choose a font color.
- In the **Effects** section, you can tick **Strikethrough, Superscript**, or**Subscript**.
- To change all the settings in the dialog box back to the Normal style which is set in the **Style** dialog box, tick the **Normal font** check box.
- Select **OK** to close the **Format Cells** dialog box.

The Excel Formatting - Alignment

To align data between the left and right sides of a cell

- Select the cell, or cells, you wish to align.
- On the Excel **Formatting toolbar**, click on the **Align Left** icon to align data with the left edge of the cell.
- Click on the **Align Right** icon to align data with the right edge of the cell.
- Click on the **Center** icon to center data in the cell.

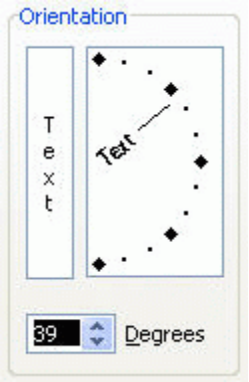
To align data between the top and bottom of a cell

- Select the cell, or cells, you wish to align.

- From the **Format** menu, click **Cells**.
- From the **Format Cells** dialog box displayed, click on the **Alignment**tab.
- In the **Text alignment** section, choose the Top, Center, or Bottom option in the **Vertical** area to align the data in the cell.
- To make the lines of data fit evenly within the height of a cell, tick the**Justify distributed** option and click on **OK**.

To change the orientation of data cells

- Select the cell, or cells, you wish to change.
- From the **Format** menu, click **Cells**.
- From the **Format Cells** dialog box displayed, click on the **Alignment**tab.
- In the **Orientation** section, you can change the **Degrees** of the text or use the mouse to drag the 'red small diamond' up or down. When satisfied, click on **OK**.



To wrap multiple lines of data in a cell

- Type the data you require into the cell and press **Enter**. The entry will appear as one long line and select the cell, or cells, you wish to format.
- From the **Format** menu, click **Cells**.
- From the **Format Cells** dialog box displayed, click on the **Alignment**tab.
- In the **Text control** section, tick the **Wrap text** check box and click on**OK**.

To shrink the text into one cell

- Type the data you require into the cell and press **Enter**.

- From the **Format** menu, click **Cells**.
- From the **Format Cells** dialog box displayed, click on the **Alignment**tab.
- In the **Text control** section, tick the **Shrink to fit** check box and click on OK.

To merge several cells

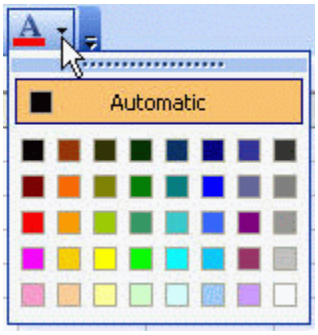
- Select the cells that you wish to merge to become one cell.
- Right-click on the selected cells, click **Format Cells**.
- From the **Format Cells** dialog box displayed, click on the **Alignment**tab.
- In the **Text control** section, tick the **Merge cells** check box and click on **OK**.

Note: You also can use the **Merge and Center** icon on the Excel**Formatting** toolbar.

The Excel Formatting - Colors

To change the color of text

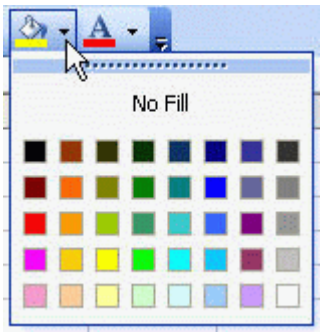
- Select the cells containing the data you want to change the color.
- On the Excel **Formatting** toolbar, click the down arrow next to the**Font Color** icon.



- Choose a color from the **Font Color** palette.
- The color you selected from the **Font Color** palette will be displayed on the new icon face. Click on the icon face to apply the new color to the cell.

To apply colors to cell(s)

- Select the cell or range of cells you wish to color.
- On the Excel **Formatting** toolbar, click the down arrow next to the **Fill Color** icon.
- Choose a color from the **Fill Color** palette.



To turn off the cell(s) color

- Select the cell or range of cells you wish to color.
- On the Excel **Formatting** toolbar, click the down arrow next to the **Fill Color** icon.
- Choose **No fill**.

The Excel Formatting - Numbers

To change number formatting using the formatting icons

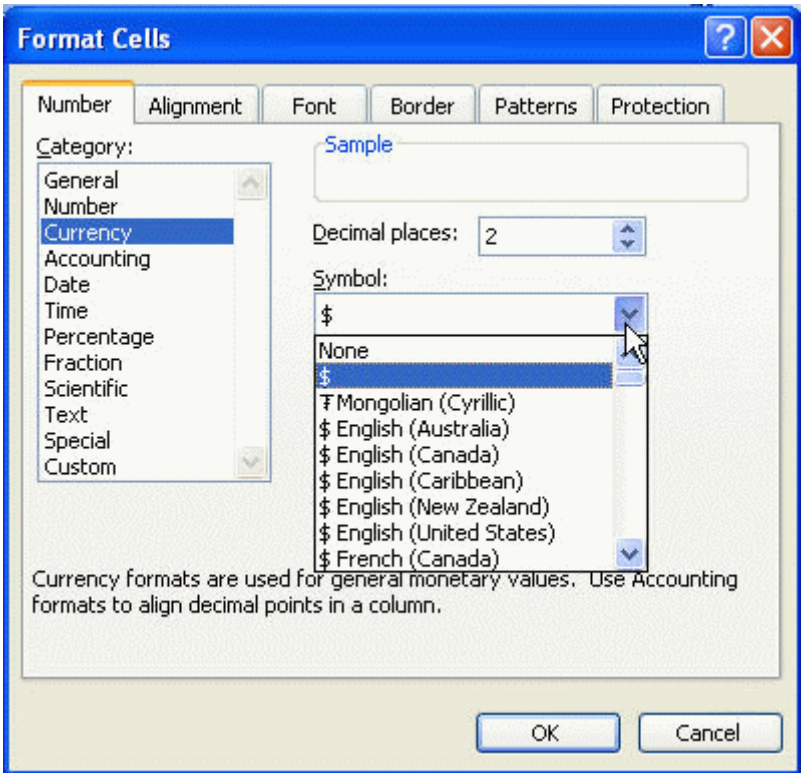
- You can quickly change the formatting of a cell or selected range by using the following icons on the **Formatting** toolbar.

Currency	12345 will become $12,345.00
Percent	.25 will become 25%
Comma	98765 will become 98,765.00
Increase Decimal	12,345.00 will become 12,345.000
Decrease Decimal	98,765.00 will become 98,765.0

To format a number as a currency

- Select the cell or range of cells you want to format.
- From the **Format** menu, click **Cells**.

- From the **Format Cells** dialog box displayed, select the **Number** tab.
- In the **Category:** section, select **Currency**.



- Select the number of decimal places you require by using the **Decimal places:** spin box arrows.
- In the **Symbol:** section drop down list, select the type of currency.
- Click **OK**.

To format a number as a percentage

- Select the cell or range of cells you wish to format.
- From the **Format** menu, click **Cells**.
- From the **Format Cells** dialog box displayed, select the **Number** tab.
- In the **Category:** section, select **Percentage**.
- Select the number of decimal places you require by using the **Decimal places:** spin box arrows.
- Click **OK**.

Excel Formula and Function

Excel Formula

A **formula** is an equation that performs operations on worksheet data. Excel formula can perform mathematical operations, such as addition and multiplication, or they can compare worksheet values or join text.

To enter a formula

- Place the cursor inthe cell where the formula will appear.
- Enter an = sign.
- Enter the expression that will produce the result you want, e.g. A5+E5. This will add the value in A5 with the value in E5.
- When the formula is complete, press**Enter**. The result ofthe formula will be calculated and displayed in the cell.
- If there is an error in an Excel formula, an error message which begin with a # sign will display.

To enter a cell or range reference by pointing

- Place the cursor in the cell where the formula will appear.
- Enter the formula up to the point of the cell or range reference, e.g. to enter the formula =E2+E5, only enter the = sign.
- Using the arrow keys, move the cell pointer to the first cell reference, in this case E2. The formula will track your progress and enter the current address into the formula.
- Enter the operand, + sign.
- Using the arrow keys, move the cell pointer to the second cell reference, in this case E5. If you are calculating a range of cells, hold down the **Shift** key while using the arrow keys to move to the intended cells.
- Press **Enter** to complete the formula when you have reached the cellyou require.

Excel Function

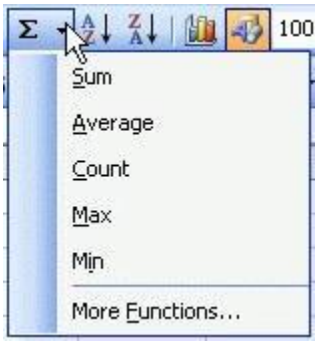
Functions are special commands used in formulas to perform mathematical processes.

To enter functions directly into the worksheet cell

- Select the cell into which the formula will be entered.
- Insert an equal (=) sign to begin the formula. The formula toolbar buttons will appear.
- Enter the name of the function [e.g. SUM], followed by an opening parenthesis [(], any arguments required for the function [e.g. E2:E5], and closing parenthesis[)].
- Press **Enter**. If there are no errors in the formula, the result of the function will be entered in the cell. If you activate the cell again, the function will be displayed in the formula bar.

To use the AutoSum function

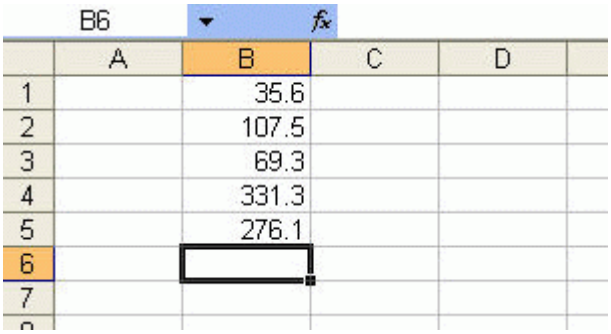
- The functions can be accessed through the **AutoSum** icon on the**Standard** toolbar.
- The functions included in the AutoSum drop-down menu will insert the function and predict the arguments.
- For example, if the active cell is positioned at the bottom of the list of values, AutoSum will display a sum function with the list of the arguments.



- Sum -- add the contents of the list of arguments.
- Average -- determine the average value of the list of arguments.
- Count -- count the number of values in the list of arguments.
- Max -- return the maximum number in the list of arguments.
- Min -- return the minimum number in the list of arguments

Example: Using the Average function

- Enter the values as shown below from B1 to B5 and select the cell B6 which the formula will be entered.



	A	B	C	D
1		35.6		
2		107.5		
3		69.3		
4		331.3		
5		276.1		
6				
7				

 Click the down arrow beside the **AutoSum** icon on the **Standard**toolbar and choose **Average** from the drop-down menu.

 If the predicted range is correct, press the **Enter** key. If it is incorrect, select (click and drag) the range you want with the mouse and press the**Enter** key.

 The result will show in cell B6. You can use the same method to do other functions such as SUM, Max, etc.

Note: Excel formula and function is one of the most powerful feature in Microsoft Excel. It is important for you to master it.

Create an Excel Chart

We will use the step-by-step Excel **Chart Wizard** to create a chart that related to the Student exam results for the subject English, Science and Mathematics.

	A	B	C	D
1	Exam result - Subject score marks			
2	**Student Name**	**English**	**Science**	**Mathematics**
3	Carol	70	75	58
4	John	52	65	79
5	Samantha	26	88	42
6	Edward	82	59	76
7				

Step 1: The Chart Wizard (1) – Chart Type

- Exam Results

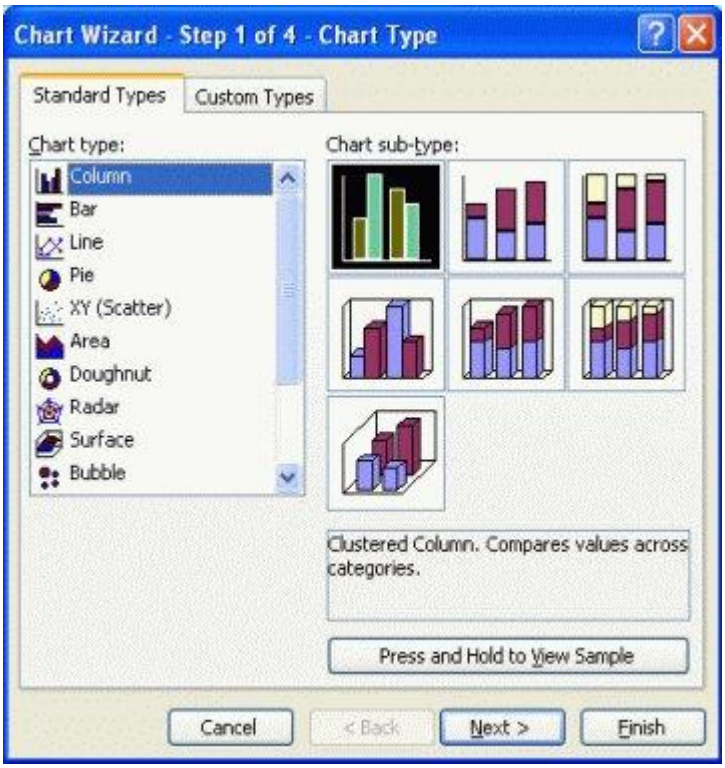
- Download Pdf

- Worksheets

- Msn

 Click on any cell within the data containing the information that you wish to display as a chart, or highlight the exact data that you wish to display as a chart.

 Click the **Chart Wizard** icon on the **Standard** toolbar. This will display the Excel Chart Wizard as show below:



 From the **Chart type:** section you can select the type of chart that you wish to create.

 Then from the **Chart sub-type:** section you can select the exact format that you required for the selected chart type.

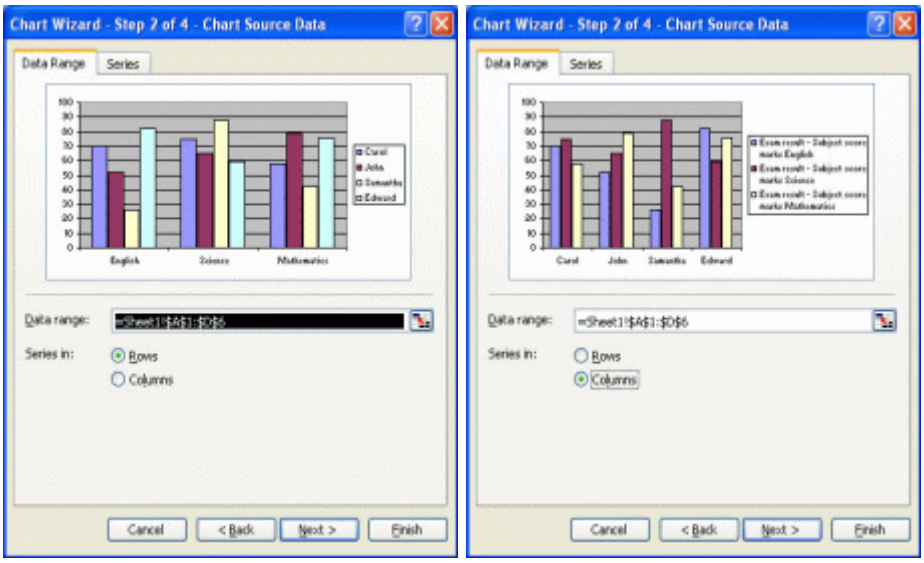
 To see how the selected chart will look, use the **Press and Hold to View Sample** button within the dialog box. In our example, we accept the default selection.

 Click the **Next** button to see the next page of the dialog box - **Chart Source Data**.

Step 2: The Excel Chart Wizard (2) – Data Source

 The **Data Range** tab allows you to specify the exact data that you wish to display within your chart.

 You can choose to display **Series in Rows** or **Columns**. In the case of the example data used, the two effects will be as illustrated. Choose the Series in **Rows**.



 When you click on the **Next** button, this will display the **Chart Options**dialog box.

Step 3: The Excel Chart Wizard (3) – Chart Options

From the chart options dialog box displayed, you can select **Titles, Axes, Gridlines, Legend, Data Labels** and **Data Table** tabs and make the necessary changes.

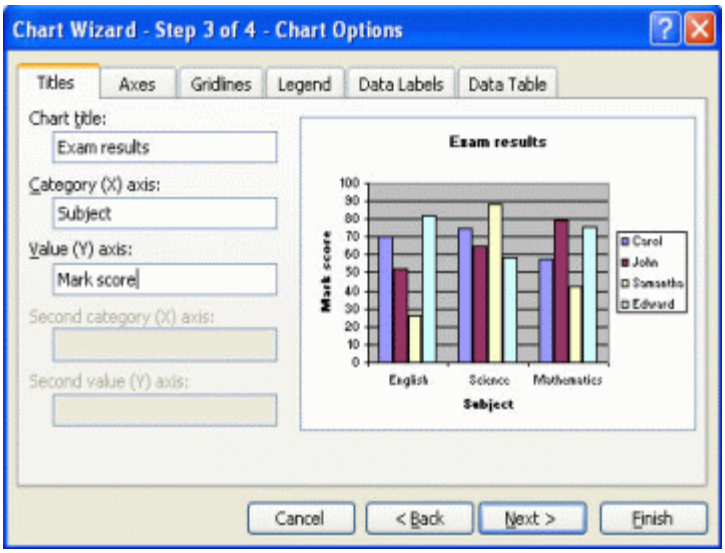
To add title to a chart

 In the **Chart title:** text box, enter the name for the chart, i.e. Exam results.

 In the **Category (X) axis:** text box, enter a title for the X axis, i.e. Subject.

 In the **Category (Y) axis:** text box, enter a title for the Y axis, i.e. Mark score.

 In the example used, the screen will be as illustrated.



To customize the chart axis

- From the **Chart Option** dialog box displayed, click on the **Axes** tab.

- It allows you to control the way the axes are displayed, you can tick or un-tick the check box to see the effects on the chart.

To customize chart gridlines

- From the **Chart Option** dialog box displayed, click on the **Gridlines**tab.

- You can choose to display the major and minor X and Y gridlines for the axis by clicking on the particular check box.

To customize chart legend

- From the **Chart Option** dialog box displayed, click on the **Legend** tab.

- You can choose to display or not the chart legend and the placement of the legend in the chart by clicking on the radio button.

To customize data labels

- From the **Chart Option** dialog box displayed, click on the **Data Labels**tab.

- You can choose to display or not the chart data labels by clicking on the radio button.

To display a data table

- From the **Chart Option** dialog box displayed, click on the **Data Table**tab.

- You can choose to display or not the chart data table by ticking on the check box.

 Click on the **Next** button to continue and this will display the final page of the Chart Wizard – Chart Location.

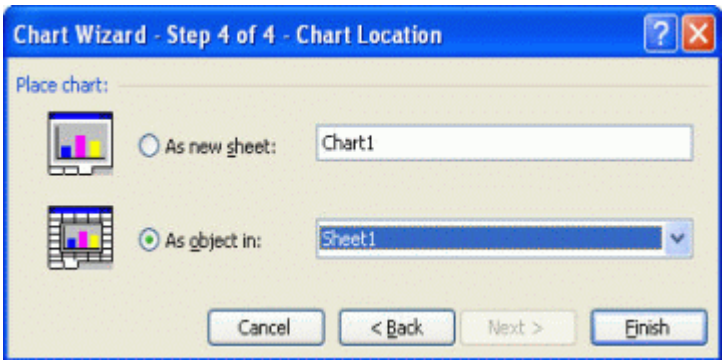
Step 4: The Excel Chart Wizard (4) – Chart Location

To define the chart location

 You can choose to place the chart on an existing worksheet as an object, or you can place it on a new worksheet. Two options for you to choose:

As new sheet: – It will place the chart in the new worksheet.

As object in: - It will place the chart in the existing worksheet.



 Click on the **Finish** button and the chart will be created as you have specified during the **Chart Wizard** creation process.

Excel Template

When working with spreadsheets you may want to use the same layout or design. You can re-create the design every time you want to use it, or you can create a**template**. Yes, it's Excel template...

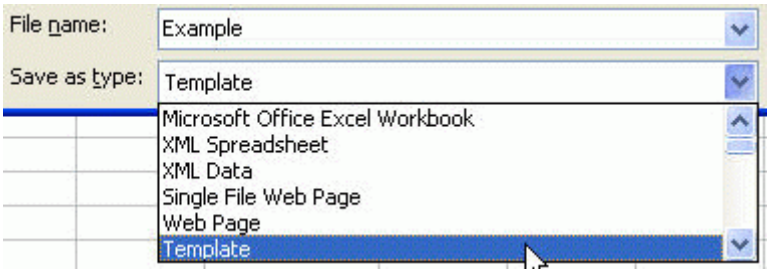
You can create templates for workbooks and worksheets. The default template for workbooks is called Book.xlt. The default template for worksheets is called Sheet.xlt.

Creating templates can include the following elements:

- Text and graphics
- Layouts and styles formatting
- Headers and Footers
- Formulas
- Macros

To create a template

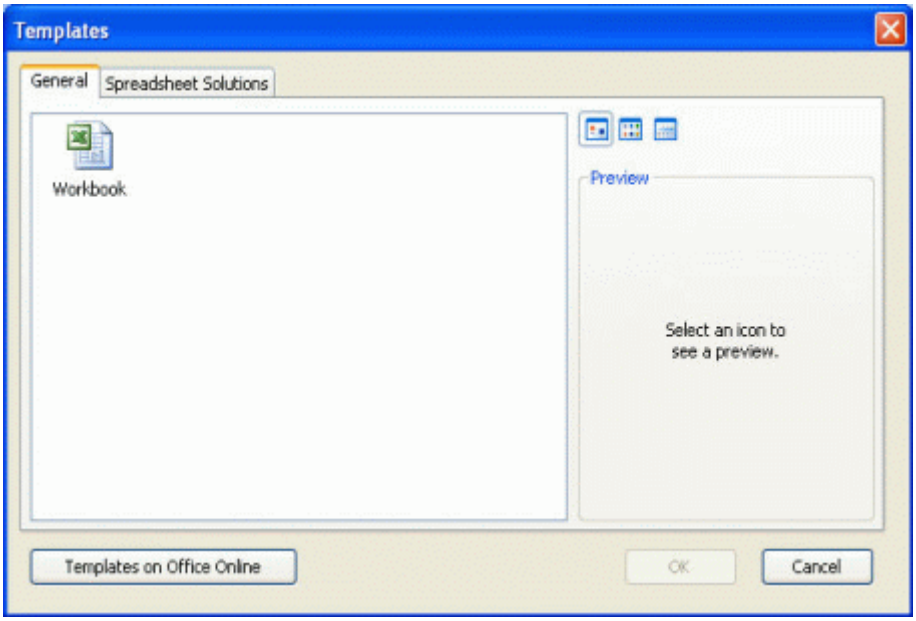
- Create the workbook that contains all layout and formatting elements you wish to save as a template.
- From the **File** menu, click **Save As**.
- Type the name for the template in the **File name:** text box.
- From the **Save as type:** drop down list box, select **Template**.



- Select **Save**. The extension **.XLT** is added to the file name and the template is saved in the **Templates** folder.

To use a template

- From the **File** menu, click **New** to display the **New Workbook** pane.
- From the **Template** section of the **New Workbook** pane, click on the blue **On my computer…** link display the **Templates** dialog box:



- Click on the **General** or the **Spreadsheet Solutions** tab to locate the template you want. For default template, click on the **General** tab and select the **Workbook** icon.

Note: In the **Spreadsheet Solutions** tab, you can see 5 templatesavailable. Most of the times you need to use the Microsoft Office CD in order to install the features and use it.

- Click **OK** to open a copy of the template.

Note: Excel 2003 allows you to access additional templates on the Microsoft Office website (required Internet connection). Just click on the**Templates on Office Online** link in the **New Workbook** pane, and you will be directed to the website and search for the template that you need.
To download different types of free excel templates, **click here.**

Template vs Style

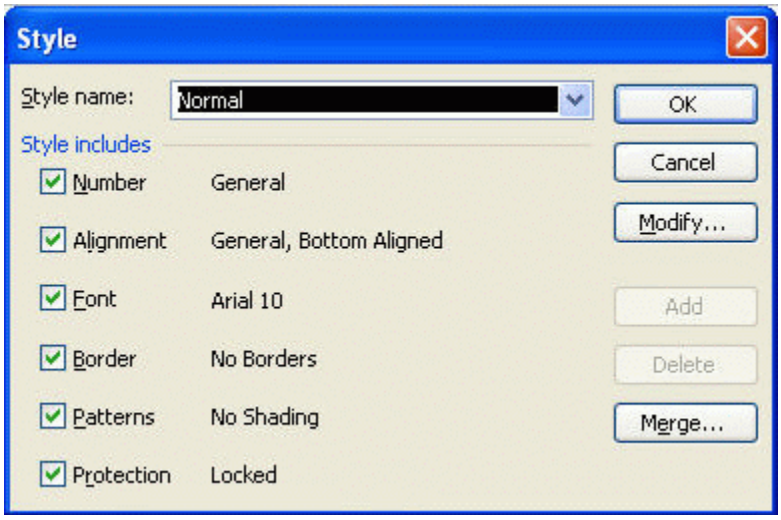
What is the different between *Excel template* and *Excel style*?

Style is a collection of cell formatting information such as font size, patterns, alignment, etc that you can define and save as a group.
If formatting information is assigned to cells using styles it is possible to easily update the appearance of a sheet by modifying the styles.
Excel comes with a number of styles pre-defined, by default all cells have the **Normal** style assigned to them. It is possible to copy styles from one Workbook to another.

To create a style

- Select a cell formatted with the attributes you required.

- From the **Format** menu, click **Style**.



- From the **Style** dialog box displayed, type the style name in the **Style name:** drop down list.

 Select the **Modify** button to change any of the attributes. The **Format Cells** dialog box will be displayed.

 Click on the **Number, Alignment, Font, Border, Patterns** and**Protection** tabs and make any changes required. Click **OK** to return to the **Style** dialog box.

 Click **OK**.

To apply a style

 Select the range of cells that you wish to format.

 From the **Format** menu, click **Style**.

 Select the style from the **Style name:** drop down list box.

 Select **OK**.

Excel Macro

 A macro is a *series of commands and functions* that can be run whenever you need to perform the task.

 Macros can automate complex tasks and reduce the number of steps required to complete tasks that you perform frequently.

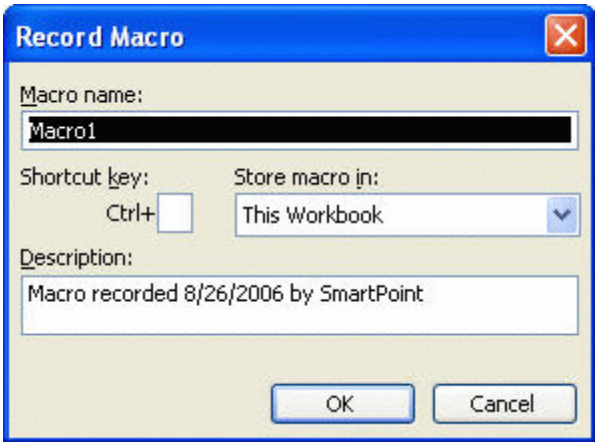
 The easiest way to create an Excel macrois to have Excelrecords the actions and then store these actions as a macro.

 Macros can be played back or modified at any time.

To record a macro

 From the **Tools** menu, point to **Macro** and click on **Record NewMacro**.

 From the **Record Macro** dialog box displayed, enter a name for the macro in the **Macro name:** text box.



- The default description is displayed in the **Description:** text box, and contains the date and user name. If required, change it.

- To begin recording, click **OK**.

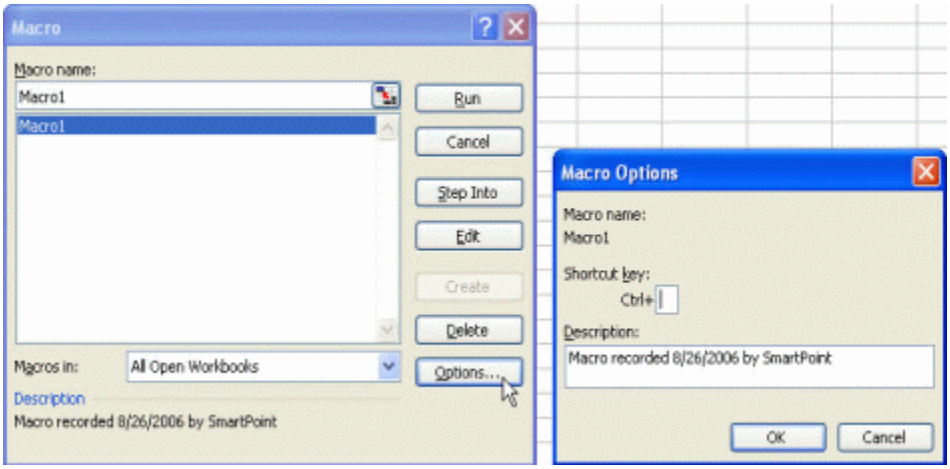
- Perform the actions you want the macro to record. Actions can be any combinations of Excel commands.

- To stop recording, from the **Tools** menu, point to **Macro** and click on**Stop Recording**.

To assign a shortcut key to the macro

- From the **Tools** menu, point to **Macro** and click on **Macros**.

- From the **Macro** dialog box displayed, select the macro name (if recorded before) to which you want to assign a shortcut key.



- Click the **Options** button to display the **Macro Options** dialog box.

- Type a letter into the **Ctrl+** text box. This combination key will be used to invoke the macro.

- Click **OK** to return to the **Macro** dialog box.
- Click on the **Cancel** button to close.

To run a macro using the Tools Macro command

- From the **Tools** menu, point to **Macro** and click on **Macros**.
- From the **Macro** dialog box displayed, click on the name of the macro you wish to run in the **Macro name:** list box.
- Click the **Run** button.Note: If you wish to edit or delete a macro, just click on the particular button.

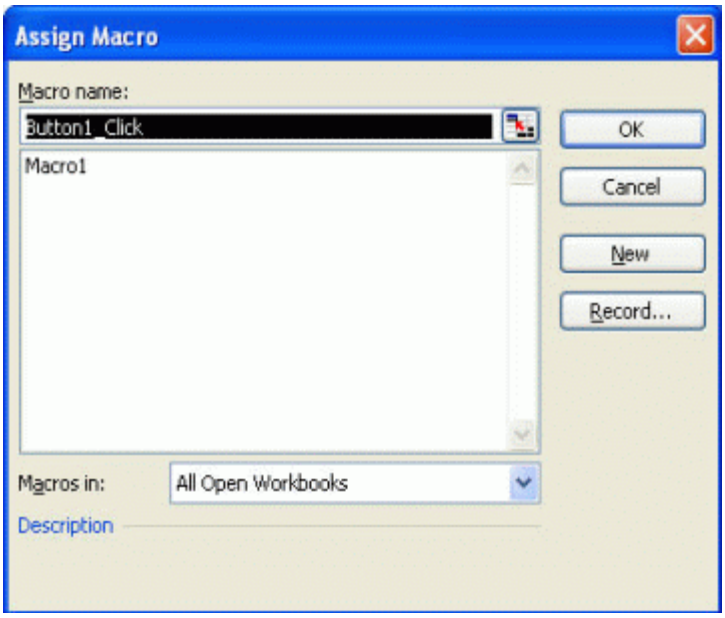
To run a macro using the assigned shortcut key

- Press **Ctrl+?**, with ? is the letter which you assigned.

To create a button and assign an Excel macro to it

- If the **Forms** toolbar is not display, right click on any toolbar that is visible and from the pop-up menu that is displayed select **Forms**.
- To create a button, click the **Button** icon on the **Forms** toolbar.

- Then, click and drag the mouse to the intended button size.
- When release the mouse button, the **Assign Macro** dialog box will be displayed.



- Click on the **Record** button and the **Record Macro** dialog box will be displayed.
- Enter a name for the macro in the **Macro name:** text box.
- Click on the **OK** button.
- Record your macro in the normal way, and click on the button and select **Edit Text** from the pop-up menu.
- To run the macro, simply click on the button.

To change a button name

- Double click on the button to highlight the button name.
- Type in a new name and click on any worksheet cell to deselect the button.

To delete a button

- Click on button and press the **Delete** key.

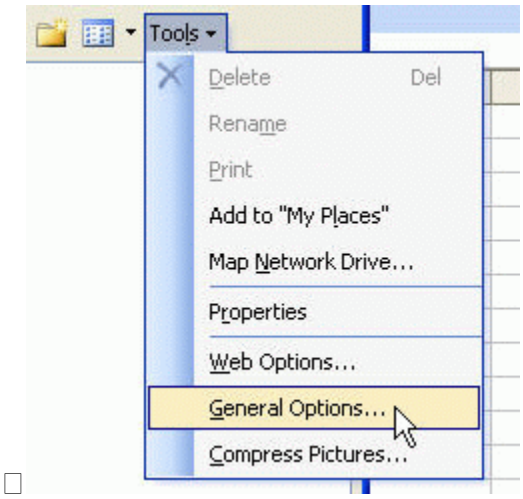
Excel 2003 Worksheet and Workbook Protection

Excel worksheet and **workbook protection** feature allows you to protect your file being open by unauthorised person. You can set the password so that anyone that intend to open the file required the password to open it.

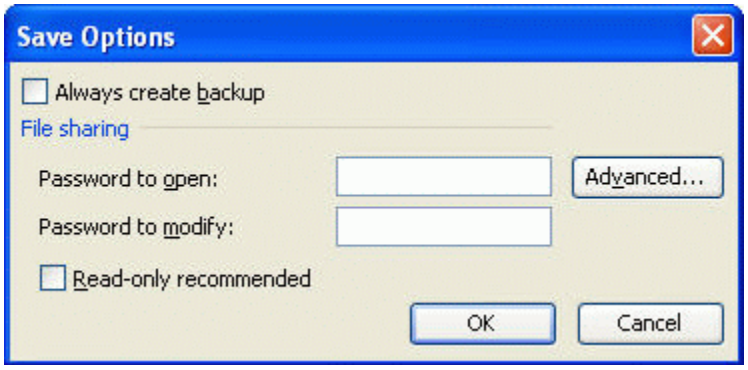
To specify a password for opening and modifying a workbook

 From the **File** menu, click **Save As**.

 From the **Save As** dialog box displayed, click on the **Tools** icon and from the drop down list displayed, select **General Options**.



 From the **Save Options** dialog box displayed, enter a password into the **Password to open:** text box. In future you will be required to enter this password in order to open the file.



 If you enter a password into the **Password to modify:** text box, this gives others the ability to open, view and edit a workbook, but not to save it with the same name. They must save a modified version of theworkbook with a different name.

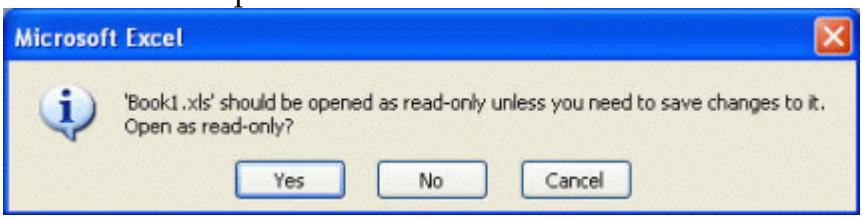
 Click on the **OK** button. You will be asked to re-type the password to ensure that it is consistent.

Note:

(1) The check box "Always create backup" forces Excel to create a backup copy of the file every

time a worksheet file is saved. The file extension **BAK** is used, and the backup file is saved in the same folder as the original file.

(2) If the "Read-only recommended" check box is ticked, the following dialog box is displayed when the file is re-opened.



- Click **Yes**.
- The file is reopen but with the feature 'read-only'.
- If you needed to make changes on the worksheet, you cannot save the file with the same file name. So, changing the file name allows you to save the file.

To remove a password from a workbook

- Open the workbook containing the password you wish to remove (by entering the password when prompted).
- From the **File** menu, click **Save As**.
- From the **Save As** dialog box displayed, click on the **Tools** icon, and from the drop down list displayed select **General Options**.
- From the **Save Options** dialog box displayed, clear either or both passwords text box.
- Click on the **OK** button to close the **Save Options** dialog box.
- Click on the **Save** button to save the file, which will display a dialog box.
- Click on the **Yes** button.

To protect a workbook

- From the **Tools** menu, point to **Protection** and click on **ProtectWorkbook**.
- This will display the **Protect Workbook** dialog box.

- From the **Protect Workbook** dialog box displayed, you have two options:

Structure	Prevents any changes to the structure of the workbook ifchecked. i.e. you will be unable to edit, insert, delete, rename, copy, move or hide sheets.
Windows	Prevents changes to the workbooks size. The windows re-sizing controls (close, maximize, minimize and restore) are hidden.

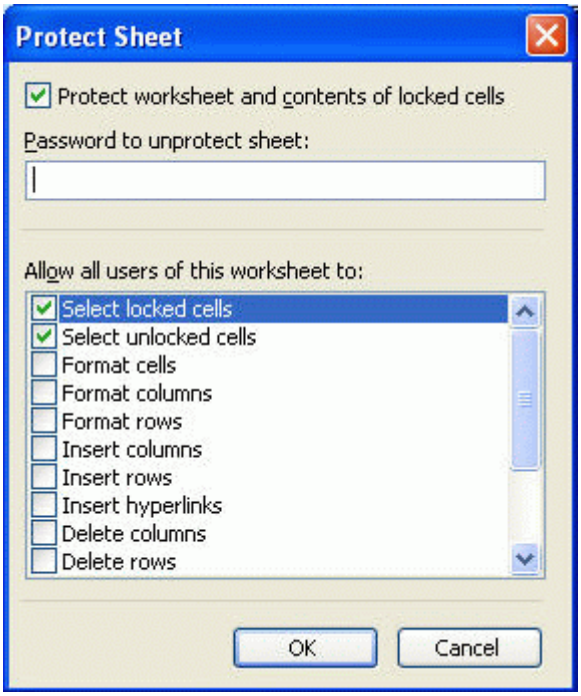
- In the **Password** column, you can enter a password (case sensitive). Click **OK**.
- You will be asked to re-type the password to ensure that it is consistent.
- Click **OK**.

To unprotect a workbook

- From the **Tools** menu, point to **Protection** and click on **UnprotectWorkbook**.
- Enter the required password and click on **OK**.

To protect a worksheet

- From the **Tools** menu, point to **Protection** and click on **ProtectSheet**.
- This will displays the **Protect Sheet** dialog box.



- From the **Protect Sheet** dialog box displayed, you can choose any option from the lists if you ALLOW other users to modify the checkedoption in the worksheet.

- In the **Password to unprotect sheet:** column, you can enter a password (case sensitive). Click **OK**.

- You will be asked to re-type the password to ensure that it is consistent.

- Click **OK**.

To unprotect a worksheet

- From the **Tools** menu, point to **Protection** and click on **UnprotectWorksheet**.

- Enter the required password and click on **OK**.

Excel Print

In order to print, Microsoft Excel requires that a printer driver has been installed that matches the printer you are currently attached to your computer.

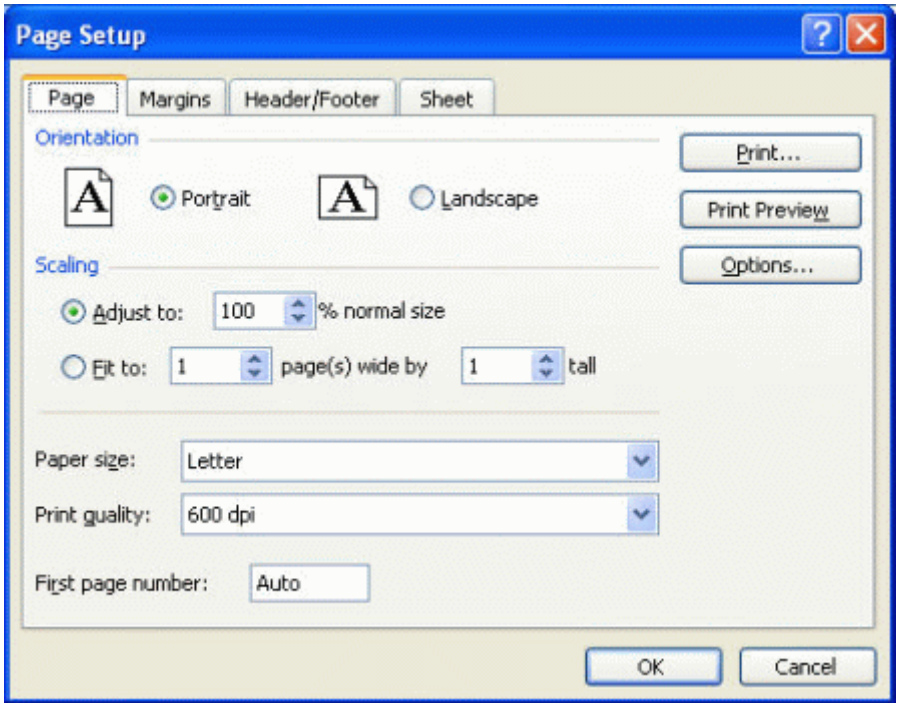
If you are sure on that, then ON the printer and load some plain papers to the printer tray.
Then, follow the step-by-step instructions below to print.

Excel Printing - Page Settings

The options that can change here includes the paper orientation, set the page scale and size, and print quality.

To change Page Setup options

- From the **File** menu, click **Page Setup**.
- From the **Page Setup** dialog box displayed, click on the **Page** tab.



To set the printing paper orientation

- In the **Orientation** section, select Portrait or Landscape by clicking the option button.

To set the scale of the page

- In the **Scaling** section, choose the **Adjust to:** option button and enter a percentage to scale (in conjunction with normal size) in the **Adjust to**spin box.
- Choose the **Fit to:** option and enter the dimensions of the pages in the wide and tall spin boxes.

To set other printing options

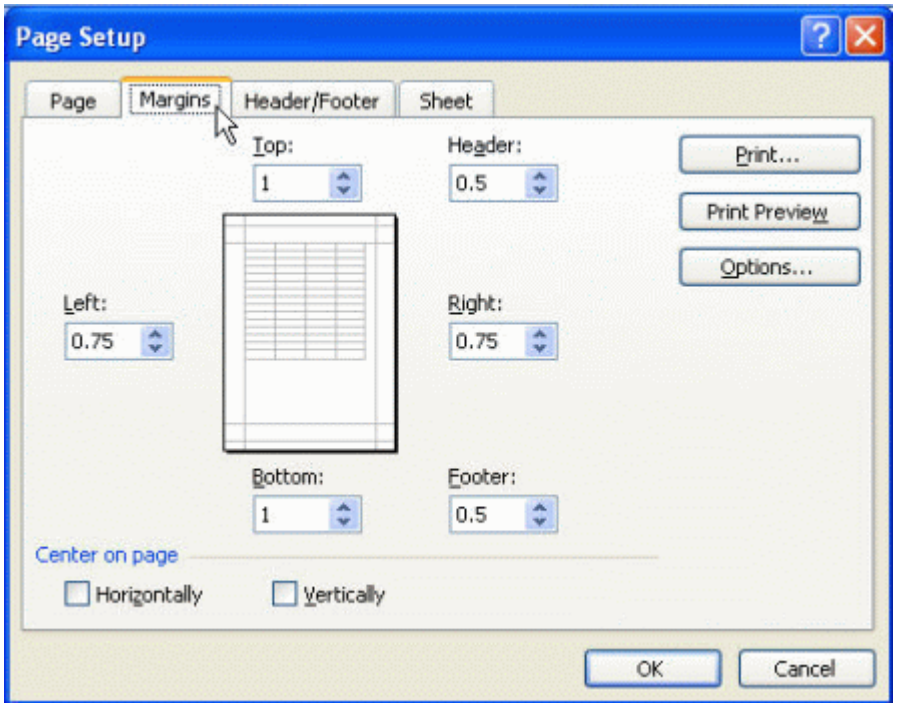
Paper size	In the Paper size: drop-down list box, select the size you require.
Print quality	In the Print quality: drop-down list box, choose the quality you require (higher dpi – better quality).
Page numbering	To begin page numbering with a different number, select the First page number: text box and enter the number you want to use.

Excel Printing - Margins Settings

Proper Microsoft Excel printing that involves margins is to set the top, bottom, left and right margins of the page. You also can choose to center the data of a page.

To change the page margins

- From the **Page Setup** dialog box displayed, select the **Margins** tab.



- Click on the **Top, Bottom, Left,** or **Right** margin spin box to change the settings.
- To change header and footer margins, click on the **Header:** or **Footer:**spin box.
- Click **OK**.**Note:** At the bottom **Center on page** section, you can choose Horizontally or Vertically to reflect the best position of your data in a page.

Excel Printing - Header/Footer Settings

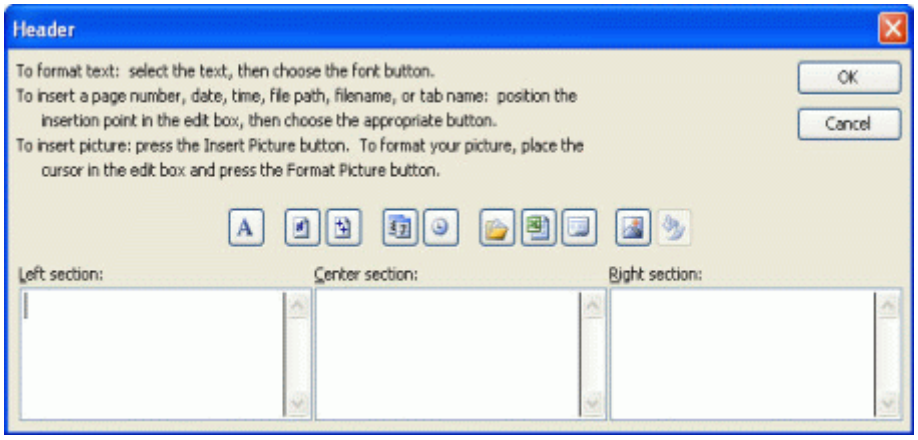
Proper settings of page header and footer are important as it will affect the overall look of a page in Excel printing.

To change headers and footers

- From the **Page Setup** dialog box displayed, select the **Header/Footer**tab.

- Click on the down arrow to the right of the **Header:** list box to reveal a list of available headers. Click on the header required to select it.

- Click on the **Custom Header** or **Custom Footer** button to display the**Header** (or **Footer**) dialog box.

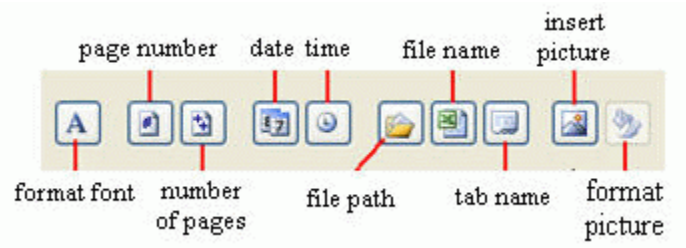


- In the **Left section:** box, enter any data you want to appear at the left margin of the header or footer.

- In the **Center section:** box, enter any data you want to appear at the center of the header or footer.

- In the **Right section:** box, enter any data you want to appear at the right margin of the header or footer.

- You also offered the following options:



Format font	Click this button after highlighting the text to change the font, size, and style.

Page number	Insert the page number of each page.
Number of pages	Use this feature along with the page number to create strings such as "page 1 of 15".
Date	Add the current date.
Time	Add the current time.
File path	Add the file path name (location of the file)
File name	Add the name of the workbook file.
Tab name	Add the name of the worksheet's tab.
Insert picture	Bring up insert picture window and you can choose a location to insert picture.
Format picture	Format the inserted picture.

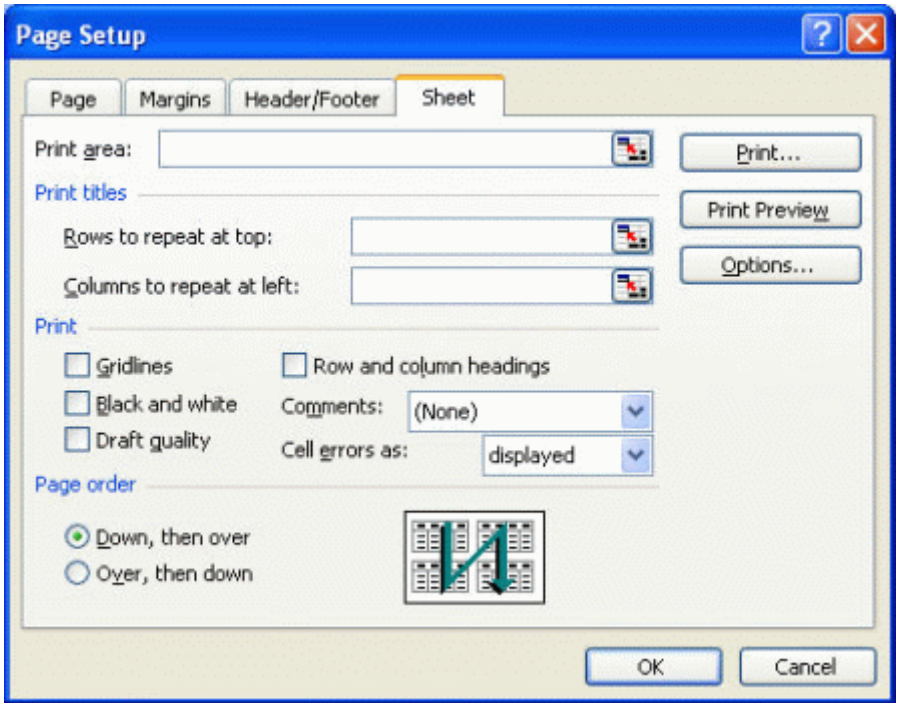
- When you have finished, click on **OK**.
- Your new header (or footer) will be displayed in the **Page Setup** dialog box in the **Header** or **Footer** list box.
- Click **OK** to close the **Page Setup** dialog box.

Excel Printing - Sheet Settings

In Excel printing, sheet settings is very important as it will control what and where to print of a page. So make sure you follow the steps here closely.

To change sheet options

- From the **File** menu, click **Page Setup**.
- From the **Page Setup** dialog box displayed, select the **Sheet** tab.



- Make changes to any of the following:

Print area	Enter the worksheet range you want to print, or click on theicon in the right of the text box and drag through theworksheet areas you wish to print.
Rows to repeat at top	Click on the icon in the right of the text box and drag over the rows you wish to repeat at the top of the page. It enables you to print the selected top row appear on every printing sheet.
Columns to repeat at left	Click on the icon in the right of the text box and drag over the columns you wish to repeat at the left of the page. It enables you to print the selected left columns appear on every printing sheet.
Elements that will print	Tick on the element you wish to print, i.e. Gridlines, Black and White, Draft Quality, Row and Column Headings (see below).
Page order	Select Down, then over, or Over, then down. You only can see the effect if you have data across a sheet that cannot fit into one printing page.

- More on printing elements (when you tick on the following option):

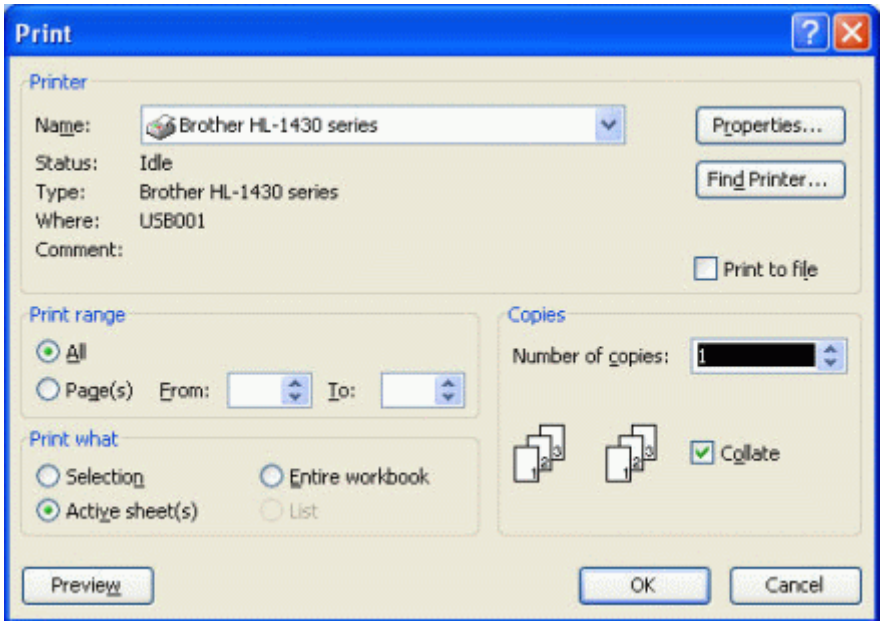
Gridlines	Will print the Excel gridlines.
Black and white	Will print the data in blank and white without color.
Draft quality	The printing will be in draft quality, not the normal quality.
Row and column headings	Will print the worksheet including the row and column headings.

- In the right hand side, there are three buttons:

Options	Do necessary adjustment with the printer settings.
Print Preview	Preview your worksheet before printing.
Print	Print the worksheet.

To change the Excel printing settings

- From the **File** menu, click **Print**.
- From the **Print** dialog box displayed, do the necessary changes as follow:



- From the **Printer** section, the **Name:** list box, choose the printer you wish to use.

 In the **Page range** section, select whether you want to print **All** pages in a range, or enter the starting and ending page numbers in the **From:**and **To:** spin boxes.

 Select what you want to print in the **Print what** section, i.e. Selection, Active sheet(s), or Entire workbook.

 Specify the number of copies you want to print in the **Number of copies:** spin box.

 Click the **Properties** button to display the **Properties** dialog box for the printer.

 Change the options required. The options will vary depending on what type of printer you have.

 Click **OK** to close the printer properties dialog box.

 Click **OK** again to start printing the worksheet.

Note: Before hit the **OK** button, ensure that you have put the plain papers to the printer tray.

Excel Help Feature

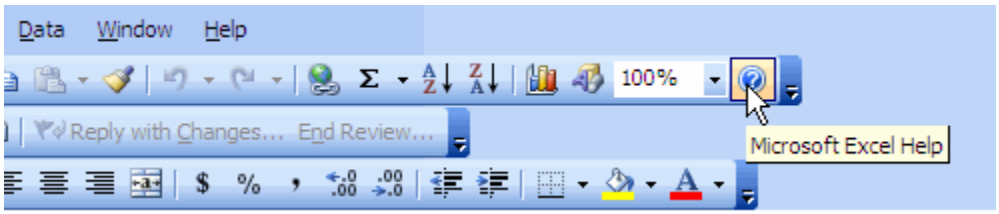
With this feature, you can almost solve allExcel related problem. It is also one of the most important features whereby you can discover the Excelrich features from the basic to advance.

So, just follow the step-by-step guide here.

Note: It's recommended that you connect to the Internet to use the Microsoft Excel 2003 Help feature.

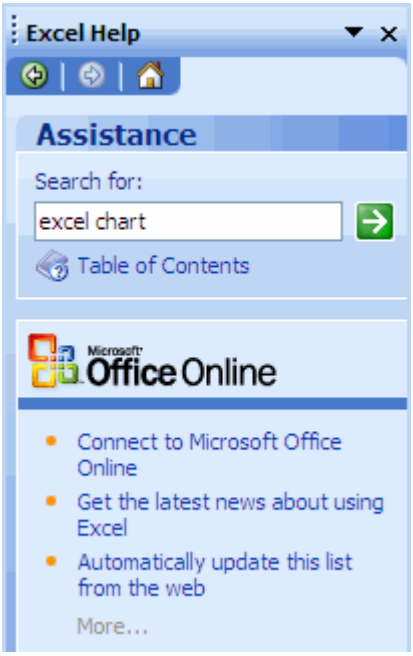
To start the Microsoft Excel Help

 Click on the **Microsoft Excel Help** icon located on the **Standard**toolbar.

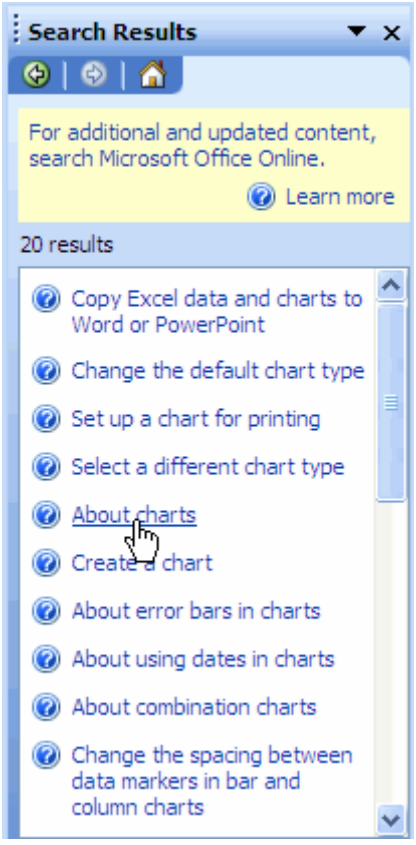


 Then you will see the **Excel Help** task pane display at the right hand side of your Excel screen.

- Type in the relevant text that you would like to get help in the **Search for:** text box.

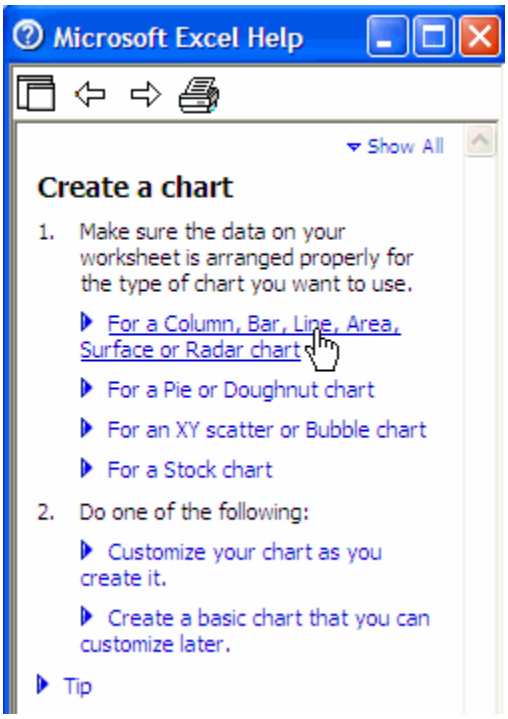


- For example, we type in 'excel chart' and press **Enter.** Then, thesearch results are displayed, normally with 20 results as shown here.



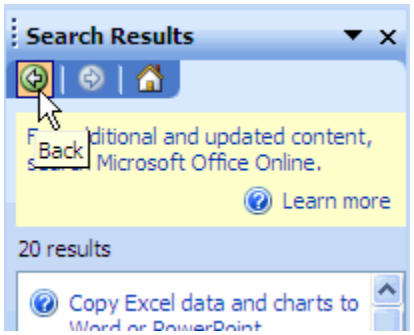
 Click on the particular topic, let say we would like to learn how to create a chart in Excel, then click on the Create a chart.

 This will bring you to another window that guides you to create a chart. There are 2 steps to create a chart.



 You can click on the blue color link to get more information. When finish, click on the **Close** button. This will bring you back to the **Search Results** pane.

 To go back search for other topic, just click on the **Back** button from the **Search Results** pane. You also can use the **Forward** button.



Microsoft Office Assistant
By default this friendly little creature willwatch what you do and offer tips on how to work more productively.

Occasionally the Office Assistant will display information on the screen. If you are unsure about how to use this feature you should always read the help offered.

Note: You are required to connect to the internet when you use the Office Assistant feature.

To show the Office Assistant

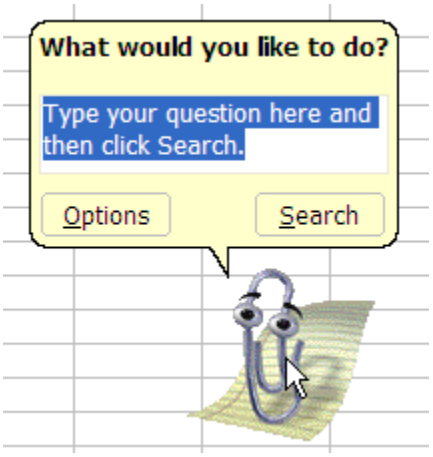
- From the Excel **Help** menu, click on the **Show the Office Assistant.**

Note: The **Office Assistant** feature required you to put in the Microsoft Office 2003 installation CD to install it first only that you can use it.

- This will display the **Office Assistant** on the screen and you can move it to any place by clicking and drag to the intended location.

To use the Office Assistant

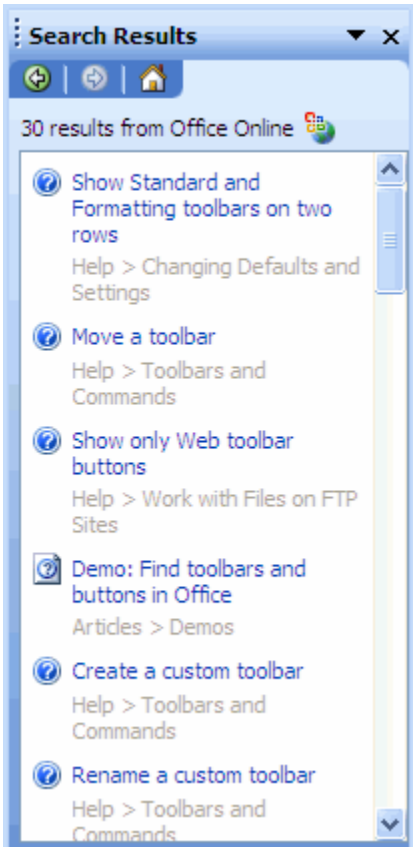
- Once you click on the **Office Assistant,** it will show something like this:



- You see the highlighted texts that say 'Type your question here and then click Search'.

- Type in any question or term that you wish to search such as 'toolbar'. It can be one word or combination of few words. Click the **Search**button.

- You will see something like the screen below. Click on the link title that you would like to know. When finish, just close it.



To hide the Office Assistant

- Right-click on the **Office Assistant** and from the pop-up menu displayed, select **Hide**.

Excel Conditional Formatting

Excel conditionalformatting allows you to apply different formatting options, such as color, to a cell or cells based on the data in the cell(s).

Here are the 2 easy steps to implement the conditionalformatting:

1. Create a set ofconditions that control formatting changes in the target cells.
2. Enter your data. If the conditions you set are met by the data, then the formatting is applied.

Note: Up to three conditions can be set for a cell, so it is possible to vary the formatting as the contents of a cell changes.

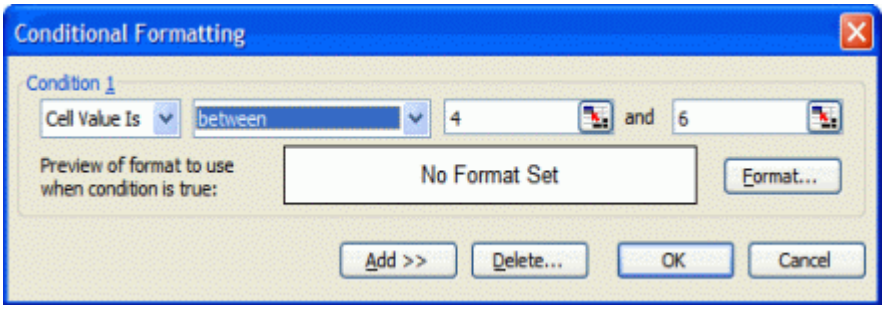
To format cells using conditional formatting

- If we enter the data as illustrated, we can then apply conditionalformatting to it.

	A	B	C
1	3	5	2
2	5	3	6
3	3	4	3
4	6	2	4
5	7	9	4

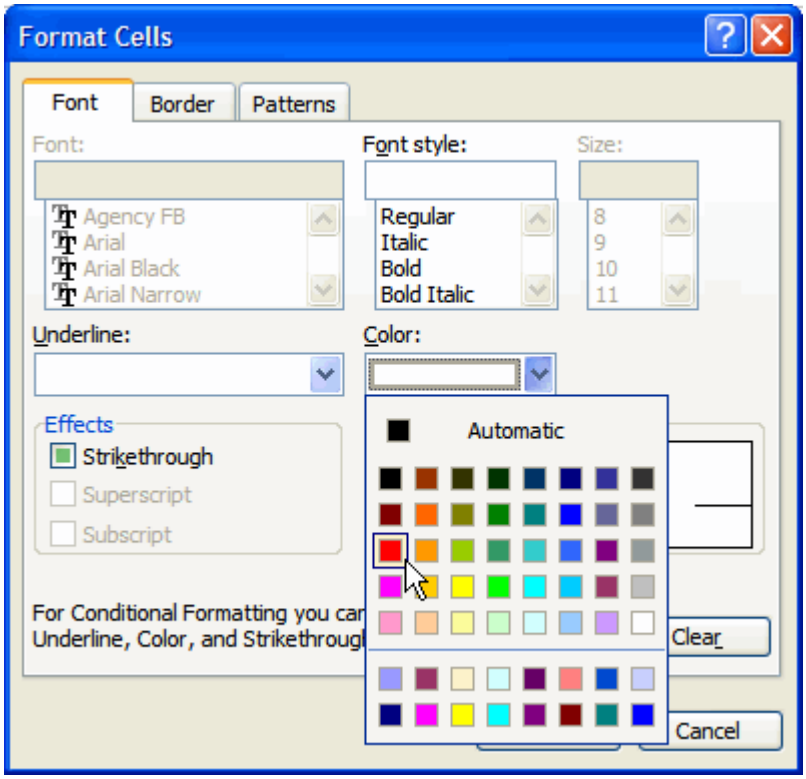
 Select the range of cells which you wish to apply conditionalformatting. In this example the range would be **A1:C5**.

 From the **Format** menu, click **Conditional Formatting**.



Lets say we wish to highlight all values between 4 and 6, then we would enter the numbers in the correct fields, as illustrated above.

 If we click on the **OK** button, then no special formatting would be applied to these values, so next we need to click on the **Format** button within this dialog box.



- From the normal **Format Cells** dialog box is displayed, from which we can specify how data that meets the specified criteria will be displayed.

- Select a color for the conditional formatting; choose red, for this example.

- When finished click on the **OK** button to close this dialog box, which will return to the **Conditional Formatting** dialog box.

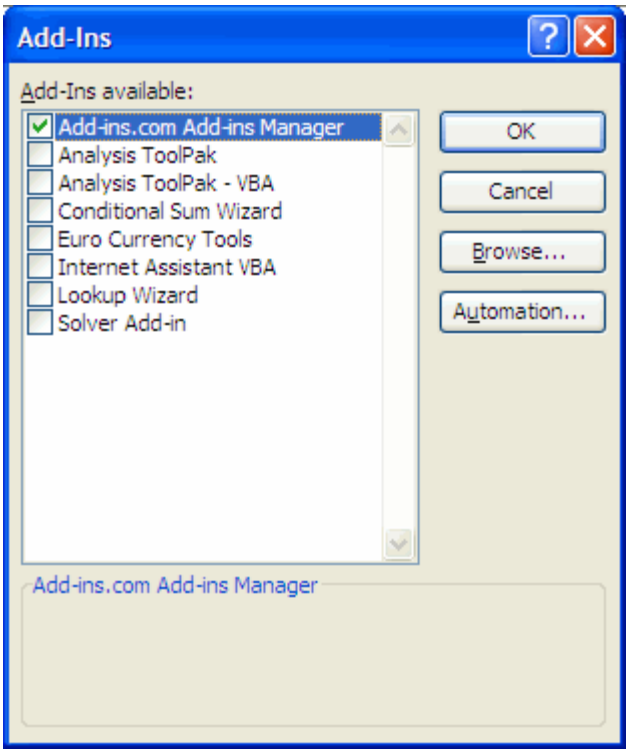
- To add the other conditional formats, click the **Add** button. Otherwise, click on **OK** button to close this dialog box.

Excel Add-in

Excel add-in is the 'extension' of the Excel program. It's a small application that when you install it, the will add an extra function to the Excel that can ease the complex tasks.

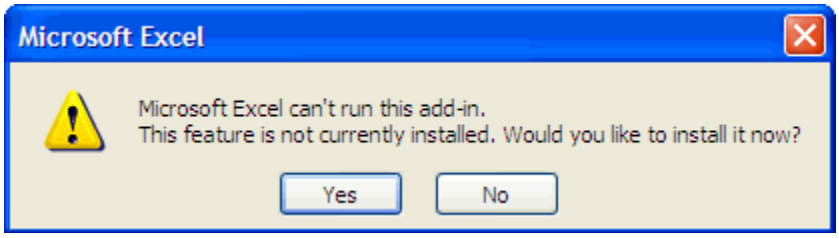
To install Excel Add-ins

- From the **Tools** menu, click **Add-ins** to display the Add-ins dialog box.



 If the add-in you want to install is already in the list then tick the corresponding check box. Click **OK** button.

 You will prompt another dialog box asking you to install the add-in as follow:



 Click **Yes** to continue. It will take some time and you may need the Office 2003 installation CD to proceed.

 If the add-in you want to install is not in the list then click the **Browse**button will displays a dialog box allowing you to browse for an additional Excel add-in.

 The **Automation** button will displays another dialog box that lists all registered COM automation servers available on the system.
Note: If you install an additional add-in the changes are not saved until you actually close Excel completely.

To uninstall Excel Add-ins
 From the **Tools** menu, click **Add-ins** to display the Add-ins dialog box.

 If the add-in you want to uninstall is in the list then uncheck the corresponding check box. Click **OK** button to uninstall the add-in.

To get free Excel Add-ins

Save As PDF - Allows you to export and save to the PDF format from your Office applications.

Excess Formatting Cleaner - Helps to remove any excess formatting in your workbooks.

Password Remover - Removes password protected workbook orworksheet.

Excel IF Function!

The **Excel IF Function**checks a condition that must be either true or false. If the condition is true, the function returns one value; if the condition is false, the function returns another value.

The function has three arguments: the condition you want to check, the value to return if the condition is true, and the value to return if the condition is false.

Here is the **Excel IF()**Syntax:
IF(Logical_test, Ation_if_true, Action_if_false)
Logical _test
The logical_test evaluates an expression to see if it passes the test, i.e. is TRUE or does not pass the test, i.e. is FALSE.

Logical operators

	Values for Evaluation A = 10 B = 5 C = 15 D = 10	Result
= (Equal to)	A=B	FALSE
	A=D	TRUE
> (Greater than)	A>B	TRUE
	A>C	FALSE
< (Less than)	A<B	FALSE
	A<C	TRUE
>= (Greater than or Equal to)	A>=B	TRUE
	A>=D	TRUE
	A>=C	FALSE
<= (Less than or Equal to)	A<=B	FALSE
	A<=C	TRUE
	A<=D	TRUE

Action_if_true
Action_if_true can be a value or an operation. Whichever, the result is placed in the cell that contains the IF ( ) Function if the logical_test is true.
Action_if_false
Action_if_false can be a value or an operation. Whichever, the result is placed in the cell that contains the IF ( ) Function if the logical_test is false.
To demonstrate the Excel IF function
Lets look at an example for calculating a bonuses based on total sales. A company offers its salesman a 5% bonus if the value of the total sales is below $5,000 per month. If the total sales exceed $5,000 per month, the bonus will be 10%.
When translated into the IF ( ) function it looks like the following:
IF(TotalSales>5000,TotalSales * 10%, TotalSales * 5%)

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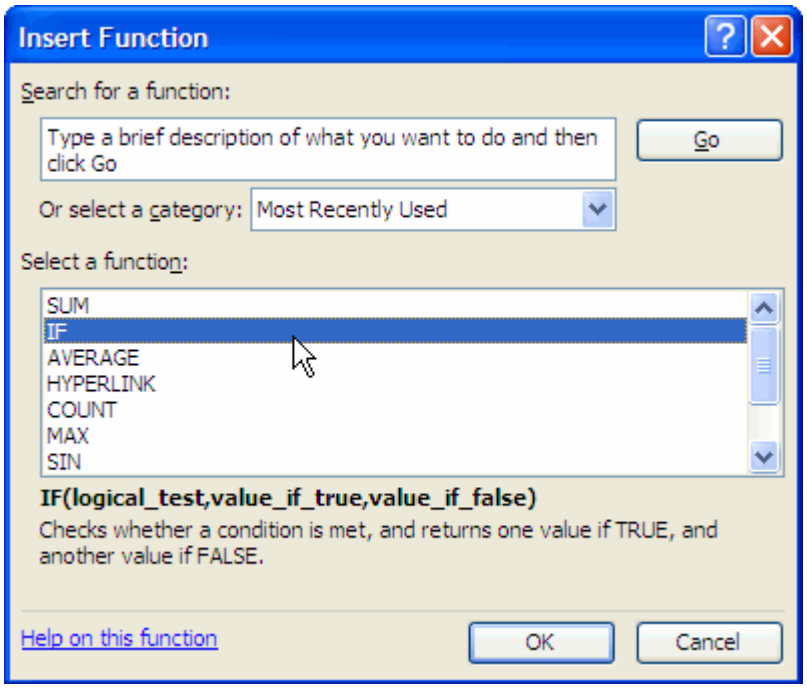
  - Enter the following data for column A and column B accordingly.

C2 fx

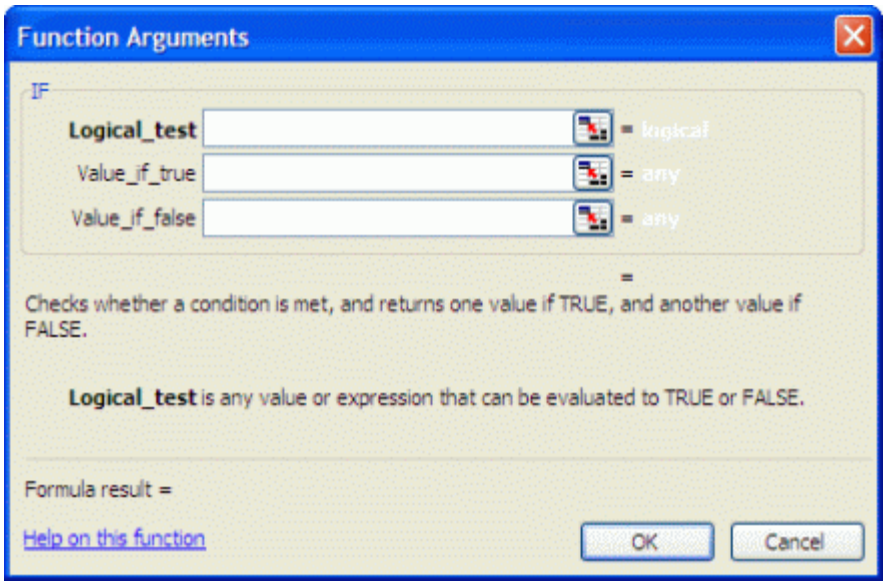
	A	B	C
1	Salesman	TotalSales	Bonus
2	Smith	$3,200.00	
3	John	$5,400.00	
4	Brian	$7,150.00	
5	Richard	$4,790.00	
6	Anderson	$5,100.00	
7			

- Click on the cell to contain the IF( ) function. In this case, cells C2.

- From the **Insert** menu, click on **Function…**to display the **Insert Function** dialog box. **OR** press the **Shift+F3**



- From the **Insert Function** dialog box displayed, select the **IF** option and then click **OK** button. The following dialog box will be displayed.



- Enter **B2 > 5000** into the **Logical_test** text area. Press the **Tab** key.
- Enter **10%** into the **Value_if_true** text area. Press the **Tab** key.
- Enter **5%** into the **Value_if_false** text area. Click **OK**.
- Follow the same procedure for the cells C3 to C6.

Note: Every time, you just need to change the data from B2 to B6, thenthe bonus will be automatically calculated.

Excel CHOOSE Function

The **Excel Choose function** allows you to select a value from a list of up to 29 items.

It uses index_num to return a value fromthe list of value arguments.
For example, if value1 through value7 are the days of the week, CHOOSE() returns one of the days when a number between 1 and 7 is used as index_num.

Here is the **Excel CHOOSE( ) Syntax:**
CHOOSE(Index_num, Value1, Value2, Value3, ...)
Index_num
This specifies which of the set of values is returned by this function. It must be a number between 1 and 29, or a formula or reference to a cell containing a number between 1 and 29.

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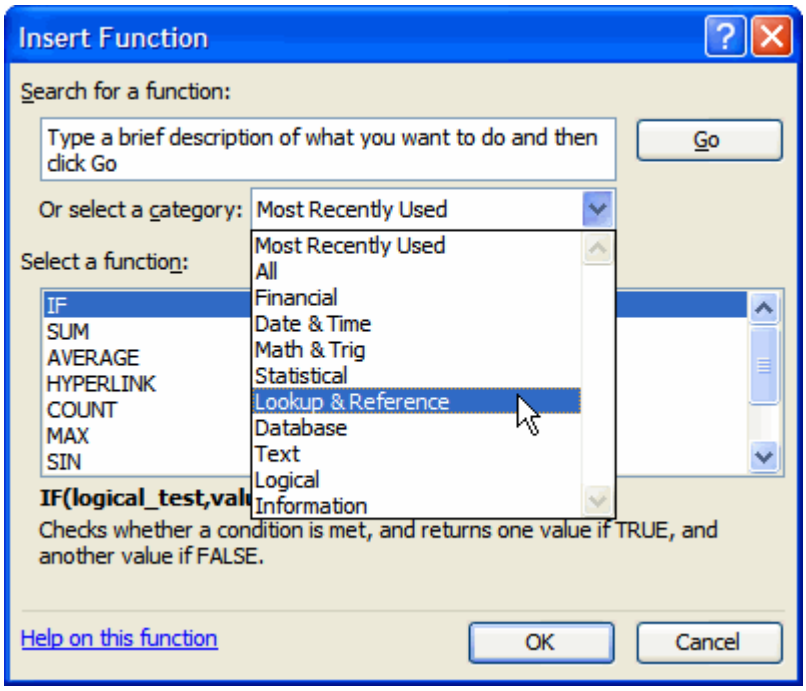
 If index_num is 1, CHOOSE returns value1; if it is 2, CHOOSE returns value2; and so on.

 If index_num is less than 1 or greater than the number of the last value in the list, CHOOSE returns the #VALUE! error value.

 If index_num is a fraction, it is truncated to the lowest integer before being used.

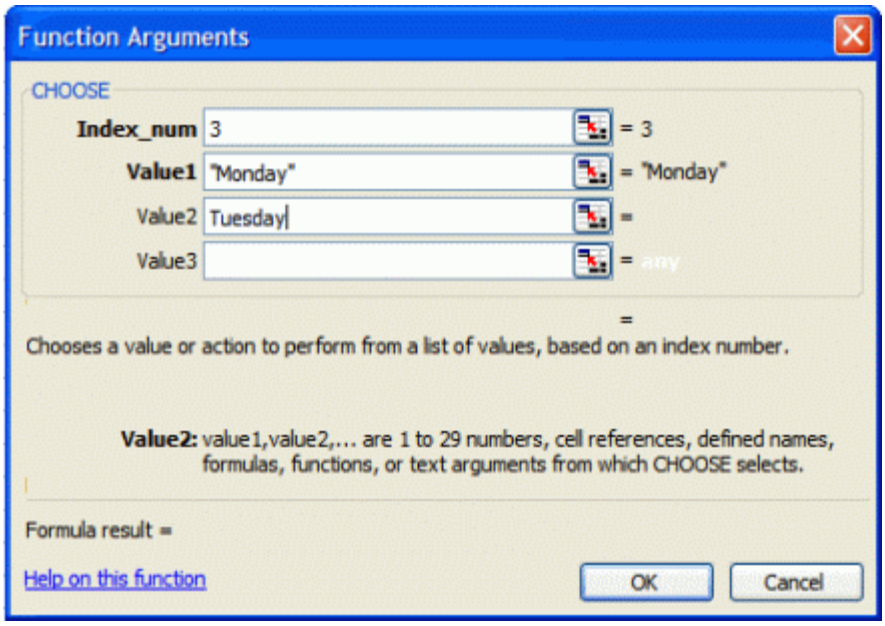
Value1, Value2, Value3…
A set of values from which the result is returned.
To use the Excel CHOOSE function (an example)
 Click on the cell where the function is to go.

 From the **Insert** menu, click on **Function…**to display the **Insert Function** dialog box.



 From the **Insert Function** dialog box displayed, under the **Or select a category:** box, select the **Lookup & Reference**.

 In the **Select a function:** section, select the **CHOOSE** and click **OK** to display the **CHOOSE** dialog box.



- Enter either a cell reference or value into the **Index_num** text entry box. In our case, enter the word 3.

- Press the **Tab** key and enter the first value to be chosen from into the**Value1** text entry box. Enter the word Monday.

- Press the **Tab** key again and enter the second value to be chosen from into the **Value2** text entry box. Enter the word Tuesday.

- Repeat the above step until finish i.e. from Monday to Sunday.

- Click **OK** when complete. You will see the result display Wednesday.

Note: If we enter the 5 in the **Index_num** text entry box, then it will return the Friday.

The Excel Date Function

Excel stores dates as a serial number giving each day of each year a unique number. The numbering system starts with 'day 1' being the 1st January 1900, 'day 2' being the 2nd January 1900, and so on.

Here is the **Excel DATE Function** Syntax:
DATE(year,month,day)
Year
The year argument can be one to four digits.

 If year is between 0 (zero) and 1899 (inclusive), Excel adds that value to 1900 to calculate the year. For example, DATE(100,1,2) returns January 2, 2000 (1900+100).

 If year is between 1900 and 9999 (inclusive), Excel uses that value as the year. For example, DATE(2000,1,2) returns January 2, 2000.

 If year is less than 0 or is 10000 or greater, Excel returns the #NUM! error value.

Month

Month is a number representing the month of the year. If month is greater than 12, month adds that number of months to the first month in the year specified. Example: DATE(1996,14,2) returns the serial number representing February 2, 1997.

Day

Day is a number representing the day of the month. If day is greater than the number of days in the month specified, day adds that number of days to the first day in the month. Example: DATE(1996,1,35) returns the serial number representing February 4, 1996.

Mathematical Date Functions

To calculate the difference between two dates in days or weeks

 In the cell A1 enter the first date. In the cell A2 enter the second date.

 In the cell A3 enter the formula =A2-A1 to calculate the difference between the second date and the first date.

 This formula calculates the difference between the two dates in days.

 To calculate the difference in weeks use the formula =(A2-A1)/7.

To add days or weeks to a date

 Enter a date in cell A1.

 In cell A2 enter the following formula: =A1+120. This adds 120 days to the date.

 To add weeks to a date, multiply the number of weeks by seven to calculate the number of days, i.e. =A1+(10*7) adds ten weeks to the date.

To add months to a date

 Enter a date in cell A1.

 In cell A2 enter the following formula: =DATE(Year(A1), MONTH(A1)+1, DAY(A1))

 If you change the +1 value to +2 or +3, you will add two months or three months on respectively.

To find out the last day of the month

 Enter a date in cell A1.

 In cell A2 enter the following formula: =DATE(Year(A1), MONTH(A1)+1, 1)-1

This will give you a date that represents the last day of the month found in cell A1.

Create an Excel Pie Chart

Here is the step-by-step guide to create an outstanding **Excel pie chart**:

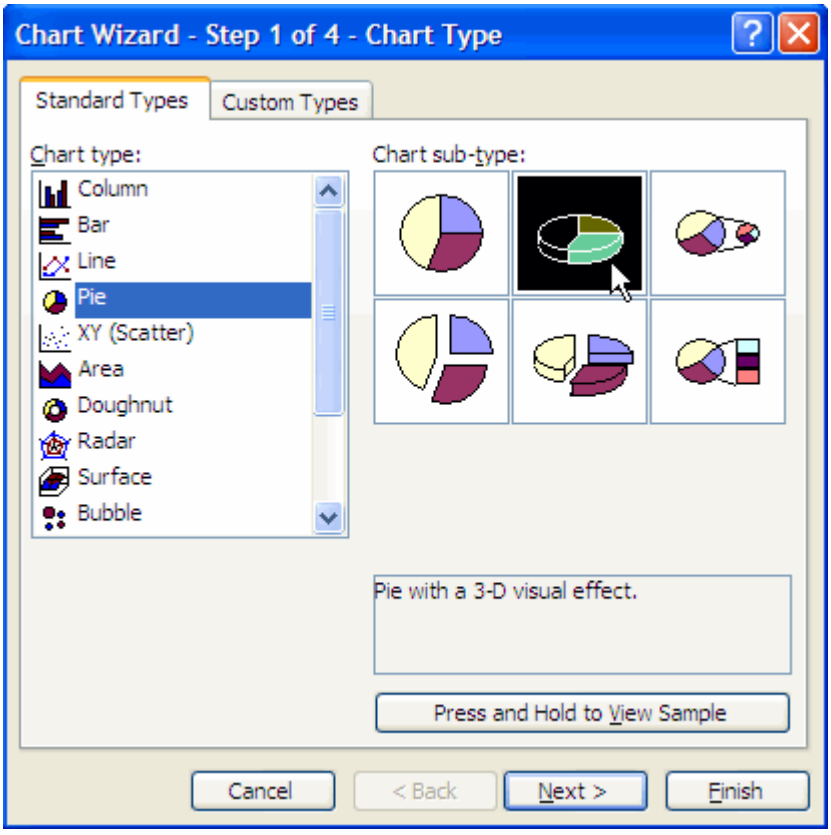
Key in the data illustrated below accordingly as we will use it as our example to create chart.

	A	B
1		
2	**Student name**	**Score Marks**
3	Carol	70
4	John	52
5	Samantha	26
6	Edward	82
7		

Step 1: The Chart Wizard (1) – Chart Type

- Click on any cell within the data containing the information that you wish to display as a chart, or highlight the exact data that you wish to display as a chart.

- Click the **Chart Wizard** icon on the **Standard** toolbar.



 From the **Chart type:** section you can select the chart type: Pie.

 Then from the **Chart sub-type:** section you can select the exact format that you required for the selected chart type.

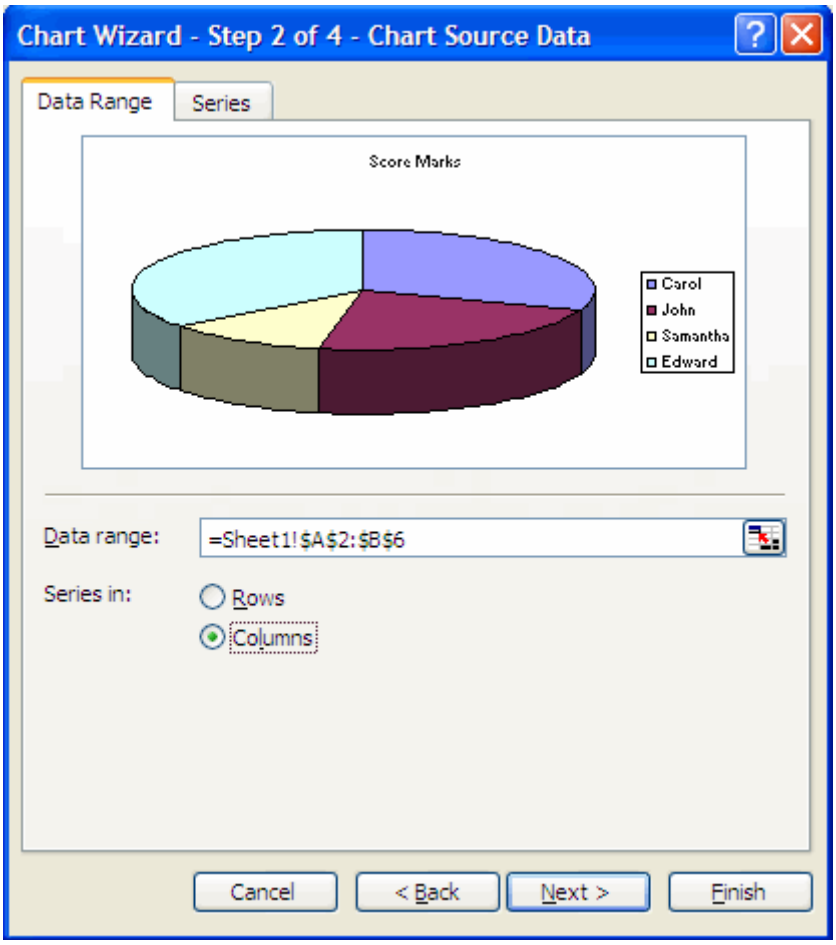
 To see how the selected chart will look, use the **Press and Hold to View Sample** button within the dialog box. In our example, we accept the default selection.

 Click the **Next** button to see the next page of the dialog box - **Chart Source Data**.

Step 2: The Chart Wizard (2) – Data Source

 The **Data Range** tab allows you to specify the exact data that you wish to display within your chart.

 You can choose to display **Series in Rows** or **Columns**. In our case here, choose the Series in **Columns** will be more appropriate.



 When you click on the **Next** button, this will display the **Chart Options**dialog box.

Step 3: The Chart Wizard (3) – Chart Options

From the chart options dialog box displayed, you can select **Titles, Legend**, and **Data Labels** tabs and make the necessary changes.

To add title to a chart

- In the **Chart title:** text box, enter the name for the chart, i.e. Score Marks.

- In the example used, the screen will be as illustrated.

To customize chart legend

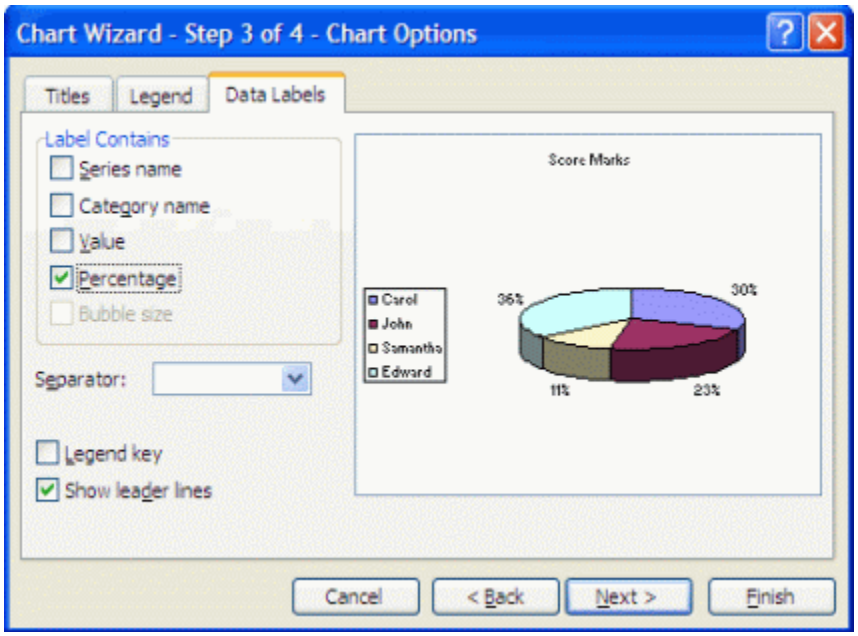
- From the **Chart Option** dialog box displayed, click on the **Legend** tab.

- You can choose to display or not the chart legend and the placement of the legend in the chart by clicking on the radio button.

To customize data labels

- From the **Chart Option** dialog box displayed, click on the **Data Labels**tab.

- You can choose to display or not the chart data labels by clicking on the radio button. In our example, tick the **Percentage** check box to display the percentage info.



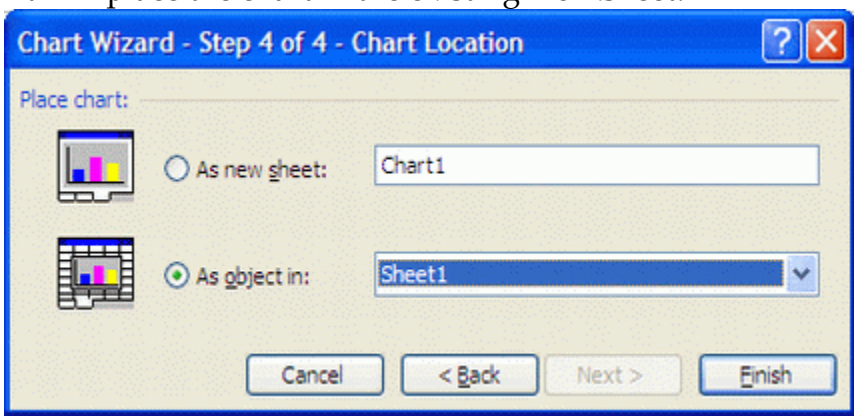
- When you click on the **Next** button, this will display the **Chart Location** dialog box.

Step 4: The Chart Wizard (4) – Chart Location

To define the chart location

- You can choose to place the Excel pie chart on an existing worksheetas an object, or you can place it on a new worksheet. Two options for you to choose:

As new sheet: – It will place the chart in the new worksheet.
As object in: - It will place the chart in the existing worksheet.



Click on the **Finish** button and the Excel pie chart will be created as you have specified during the **Chart Wizard** creation process.

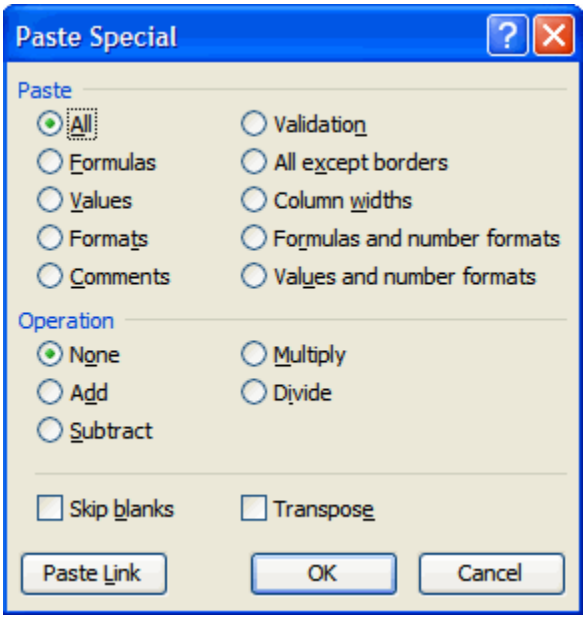
Excel Paste Special Feature

After copying data, you can use the Excel**PasteSpecial**command to paste specific cell contents such as formulas,formats, or comments from the clipboard into an Excel worksheet.

You can also use**Paste Special** to paste a link to Excel data or data from another program, such as Microsoft Word.

To use Paste Special to link to Excel data

- Select the range of data that contain the items or attributes you wish to copy.
- From the **Edit** menu, click **Copy**.**OR** press **Ctrl+C**
- Highlight the cell where you want to place the range.
- From the **Edit** menu, click **Paste Special**.



 From the **Paste Special** dialog box displayed, under the **Paste**section, choose **All** or **All except borders** option. Other options included:

Choose this option	To
All	Paste all cell contents and formatting.
Formulas	Paste only the formulas as entered in the formula bar.
Values	Paste only the values as displayed in the cells.
Formats	Paste only cell formatting.
Comments	Paste only comments attached to the cell.
Validation	Paste data validation rules for the copied cells to the paste area.
All except borders	Paste all cell contents and formatting applied to the copied cells except borders.
Column widths	Paste the width of one column or range of columns to another column or range of columns.
Formulas and number formats	Paste only formulas and number formatting options from the selected cells.
Values and number formats	Paste only values and number formatting options from the selected cells.

 Under **Operation** section, specify which mathematical operation, if any, you want to apply to the copied data.

Choose this option	To
None	Paste the contents of the copy area without a mathematical operation.
Add	Add the values in the copy area to the values in the paste area.
Subtract	Subtract the values in the copy area to the values in the paste area.
Multiply	Multiply the values in the copy area to the values in the paste area.
Divide	Divide the values in the copy area to the values in the paste area.

Note: Mathematical operations can be applied only to values. To use an option other than **None**, you must choose **All, Values, All except border**, or **Values and number formats** under **Paste** section.

- To avoid replacing values in your paste area when blank cells occur in the copy area, select **Skip blanks** check box.

- To change columns of copied data to rows, or vice versa, select**Transpose** check box.

- Click **OK** button when finish.

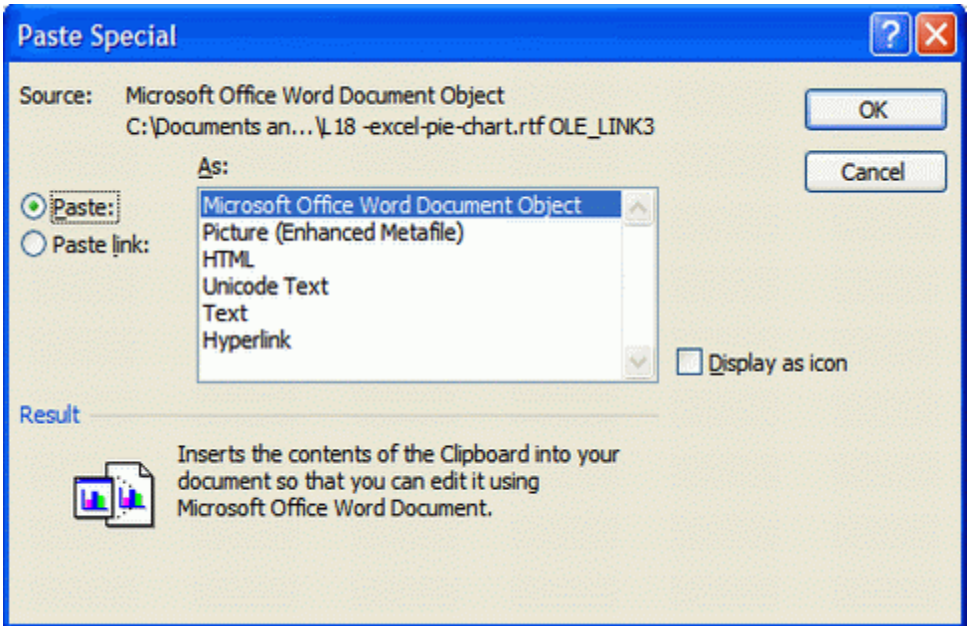
To use Paste Special to link data from another program (MS Word)

- In Microsoft Word, highlight the range of text that you wish to copy.

- From the **Edit** menu, click **Copy**.**OR** press **Ctrl+C**

- Highlight the cell where you want to place the range in Excel.

- From the **Edit** menu, click **Paste Special** to display the dialog box.



- In the **As** box, click the **Microsoft Office Word Document Object**.

- Choose the **Paste link:** option to link the pasted data to its source document. To paste and embed the information without creating a link, choose **Paste:** option.

- Click **OK** button.

Excel AND Function

The **Excel AND function** returns TRUE if all conditions are TRUE. It returns FALSE if any of the conditionsare FALSE.

To determine whether the return will be TRUE or FALSE, the function evaluates at least one mathematical expression located in another cell in thespreadsheet.
The syntax for the**AND** function is:
=AND (Condition1, Condition2, ...)
condition is something that you want to test that can either be TRUE or FALSE.
Note: In Excel 2007, the **AND** function can contain a maximum of 255conditions. For earlier versions of Excel, the limit is 30 conditions.
To use the AND() function (an example)

- Type in the text in Excel A1 and A2 as follow:

	A	B	C
1	88		
2	Microsoft Excel		
3			
4			
5			

 Click on any cell that you wish the result to appears. Type the functions below, the **AND** function will return the following results:

=AND(A1>10, A1<100) would return TRUE.
=AND(A1=88, A2="Microsoft") would return FALSE.
=AND(A1>=50, A1<=88, A2="Microsoft Excel") would return TRUE.

To combine the AND function with IF function
 Let's look at the following example that shows nesting the **AND**function inside the **IF** function.

 In the spreadsheet, type-in the following values accordingly:
Cell C1: 75
Cell C2: 95
Cell C3: 85

 Click on the cell C5 and enter the function below.
=IF(AND(B1>80,B2>80,B3>80),"Good","Not Good")

 If all three of these cells (C1,C2 and C3) contains a value greater than 80, the **IF** function will show the statement *Good* in cell C5.

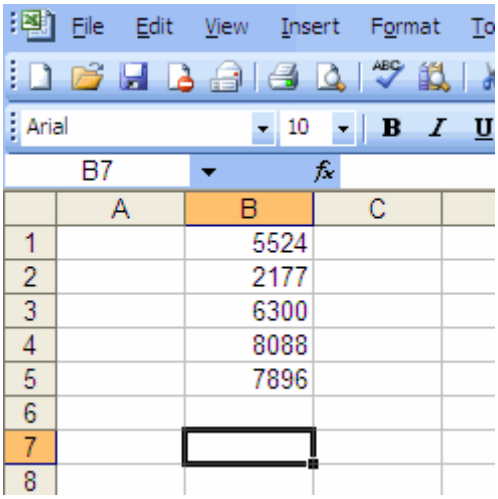
 If any of these three cells contain a number less than or equal to 80, the **IF** function shows the statement *Not Good* in cell C5.

 So, the result in cell C5 will be *Not Good* since the cell C1 contains value that is less that 80.

Excel MIN Function

The **Excel MIN function** is used to find the smallest value in the selected range of cells or a given list of arguments. Text and blank entries are not included in the calculations of the **MIN** function.
The syntax for the **MIN** function is:

=MIN (Argument1, Argument2, ... Argument30)
Argument1, Argument2, ... Argument30 can be numbers, named ranges,arrays, or cell references. Up to 30 arguments can be entered in Excel2003.
To use the MIN function (an example)
 Enter the following data into cells B1 to B5:



- Click on cell B7 where the results will be displayed.
- Type **=MIN(B1:B5)** in cell B7.
- Once finish, press the **Enter** key on the keyboard.
- The answer 2177 appears in cell B7 which is the smallest number in the list.

Excel MAX Function

The **Excel MAX function** is used to find the largest value in the selected range of cells or a given list of arguments. Text and blank entries are not included in thecalculations of theMAX function.

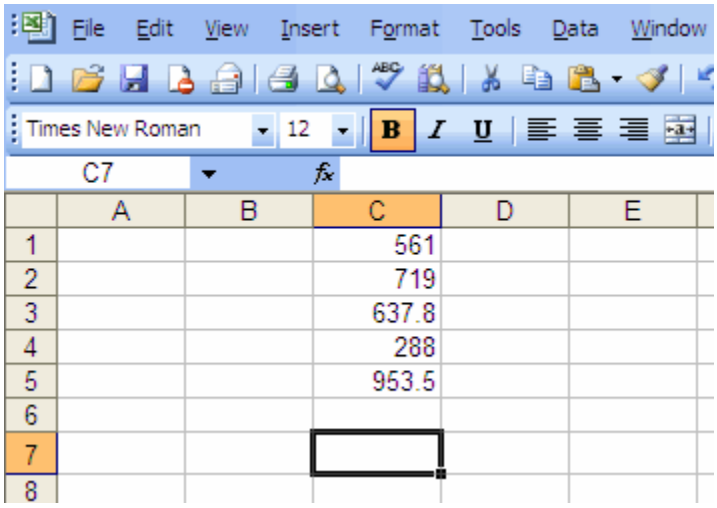
The syntax for theMAX function is:

=MAX(Argument1, Argument2, ... Argument30)

Argument1, Argument2, ... Argument30 can be numbers, named ranges, arrays, or cell references. Up to 30 arguments can be entered in Excel 2003.

To use the MAX function (an example)

- Enter the following data into cells C1 to C5:

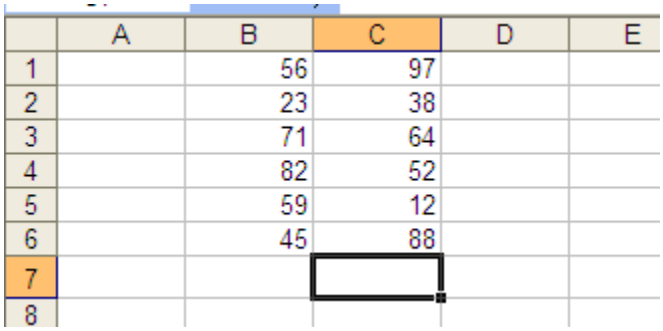


- Click on cell C7 where the results will be displayed.
- Type **=MAX(C1:C5)** in cell C7.
- Once finish, press the **Enter** key on the keyboard.
- The answer 953.5 appears in cell C7 which is the largest number in the list.

Excel COUNT Function

Excel COUNT function will return the number of entries (actually counts each cell that contains number data) in the selected range of cells.
Text and blank entries are not counted. If number data is later added to an empty cell in the range, the count total is automatically updated.
The syntax for the function is:
=COUNT(argument)
Argument is the range of cells to be totaled.
To use the COUNT function (an example)

- Enter the following data into cells B1 to C6:



- Click on cell C7 where the results will be displayed.
- Type **=COUNT(B1:C6)** in cell C7.
- Once finish, press the **Enter** key on the keyboard.
- The answer 12 appears in cell C7.

Note: Since dates, times, and formulas are stored as numbers in Excel,the COUNT function will include any cells containing these types of data in the total.

Excel AVERAGE function

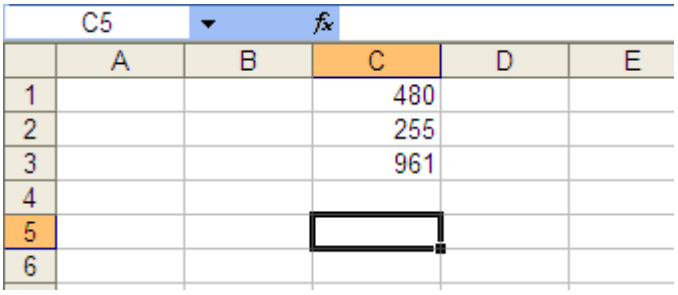
The **Excel AVERAGE function** can be used to calculate the average, or arithmetic mean, of values in a selected range of cells.
The syntax of this function is written as follows:
= AVERAGE (argument)
The argument for this function is data contained in the selected range of cells.
To use the AVERAGE function (an example)

- Enter the following data into cells C1 to C6.
- Click on cell C7 where the results will be displayed.
- Type "**=AVERAGE(** " in cell C7 (without the quote).
- Click and drag to select cells from C1 to C6 with the mouse.
- Type the closing bracket ") " after the cell range in cell C7 (without the quote).
- Once finish, press the **Enter** key on the keyboard.
- The answer 470.83 should be displayed in cell C7.
- The complete function **=AVERAGE(C1:C6)** appears in the formula bar.

Excel OR Function

The **Excel OR function** returns TRUE if one condition are TRUE. It returns FALSE if all of the conditions are FALSE.
To determine whether the output will be TRUE or FALSE, the function evaluates at least one mathematical expression located in another cell in the spreadsheet.
The syntax for the **OR** function is:
=OR (Condition1, Condition2, ...)
condition is something that you want to test that can either be TRUE or FALSE.
To use the OR( ) function (an example)

- Type in the number in cells C1 and C3 as follow:



- Click on cell C5 where the results will be displayed.
- Type **=OR(C1>500, C2>500, C3>500)** in cell C5
- Once finish, press the **Enter** key on the keyboard.
- The answer TRUE appears in cell C5.

Note: If any of these three cells (C1,C2, or C3) contains a value greater than 500, the output for the OR function in cell C5 will be TRUE. If all three cells have numbers less than or equal to 500, the output will be FALSE.

The Excel RAND function

The **Excel RAND function** will generate a random number in Excel that is greater than or equal to 0 and less than 1.
The syntax for the **RAND** function is:
=RAND( )

To use the RAND( ) function (examples)

- To generate a random number between 0 and 100, use **=RAND() *100**
- To generate a random number and return only whole numbers use**=INT(RAND()*100)**
- To generate a random number between 100 and 200, use **=RAND() *(200-100)+100**

Note: If you want to use **RAND** function to generate a random number but don't want the numbers to change every time the cell is calculated, you can enter **=RAND()** in the formula bar, and then press **F9** key to change the formula to a random number.

Excel Automatic Calculation Capability

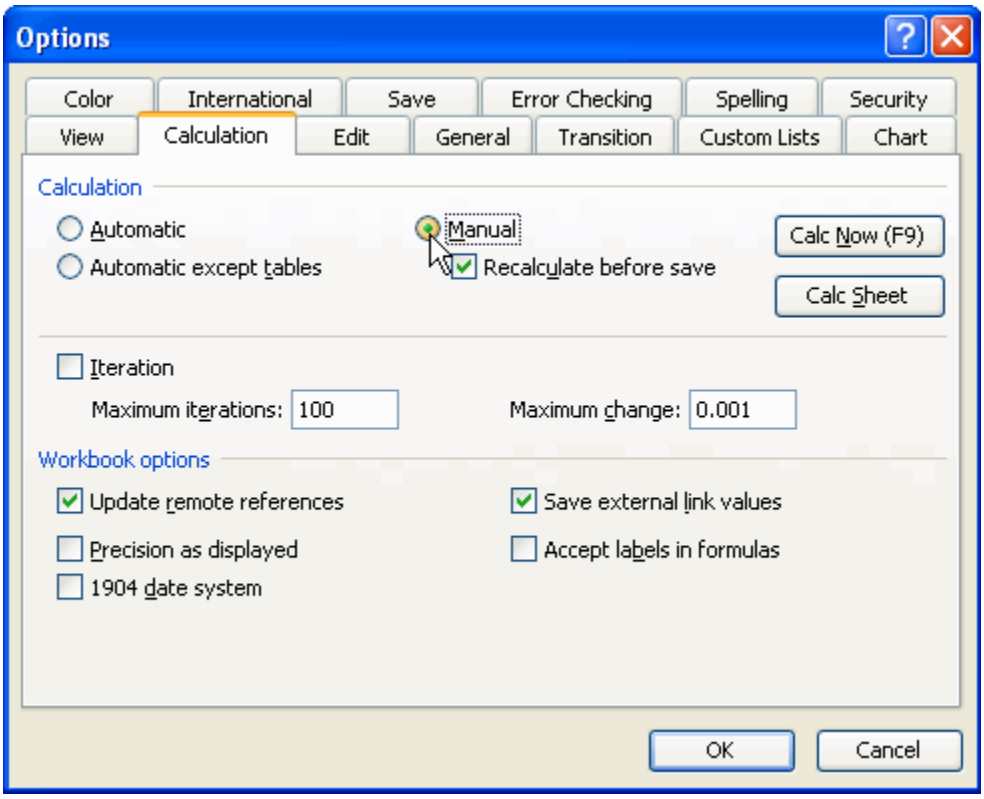
Microsoft Excel AutomaticCalculation feature is an extremely dynamic capability that by default automatically recalculates any changes you make to your Microsoft Excelworksheets.

Sometimes though you may find that due to the complexity and the size of yourworksheet, you may want to control when the Microsoft

Excelapplicationrecalculates your workbook or you may find that you just want a singleworksheet to be recalculated.
To control the **Excel 2003 Automatic calculation** the worksheet, you must first turn the default automatic calculation function to manual.

To turn off the automatic calculation

- From the **Tools** menu and select the **Options** command.
- From the **Options** dialog box will displayed, select the **Calculation** tab.



- Under the **Calculation** section, select the **Manual** radio button.
- Click the **OK** button.

Once you are in manual calculation mode, there are two ways you can force the Microsoft Excel to recalculate.

To use the automatic calculation feature

- From the **Tools** menu and select the **Options** command.
- From the **Options** dialog box will displayed, select the **Calculation** tab and then use either the **Calc Now (F9)** or **Calc Sheet** buttons.
- To recalculate the entire workbook, click on the **Calc Now (F9)** button

OR press **F9** key.

 Click on the **Calc Sheet** button will only update your current worksheet **OR** press **Shift + F9**.

Copy Excel Worksheet from one Workbook to Another

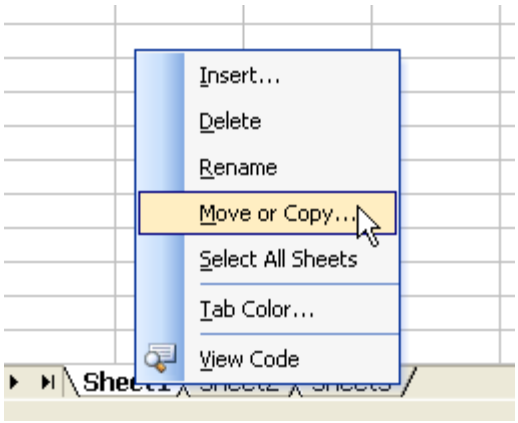
If you use MicrosoftExcel, then you've run into the situation where the information in a worksheet is needed in anotherworkbook. You could go through and copy and paste the cells from one worksheet to another, but if you are working with a large spreadsheet, this is way too painful. Excelmakes it easy to copy (and even easier to move) worksheetsfrom one workbook to another.

To copy a worksheet to another workbook

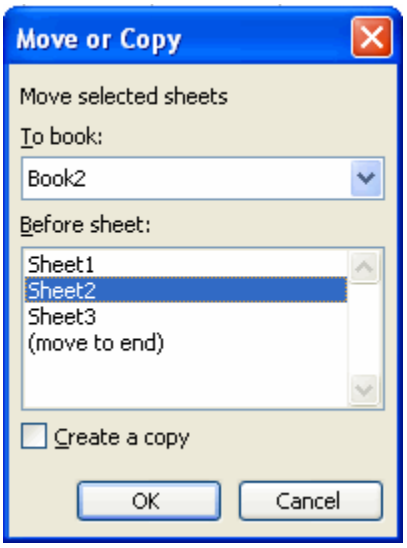
Open the workbook that you intend to copy the worksheet. (Ex: Book1)

 Open another workbook that you want the worksheet copied to. (Ex: Book2)

 Go to the workbook with the desired worksheet that you wish to copy. Right-click on the tab of the target worksheet.



 Select **Move or Copy…** from the menu.



- From the **Move or Copy** window appears, use the **To book:** dropdown list to select the workbook that you want to copy the worksheet to. (Ex: Book2)

- Then select the existing sheet that you want the copy to be placed in front of. For example, if you select the Sheet2, the copied worksheet will be place before the Sheet2.

- Check the **Create a copy** check box.

- Click **OK**. You will now have the same worksheet in both workbooks.

Note: To move a worksheet to another workbook, just follow the above steps and simply exclude checking the **Create a copy** check box.

The Excel Shared Workbook - How to Setup?

Do you know the **Excel Shared Workbook** function?

Yes, Microsoft Excel 2003 allows multiple people entering information into the same spreadsheet at the same time. This function in Microsoft Excel is called SharedWorkbooks. It's also one of the clear advantages of using Excel over other spreadsheet programs.

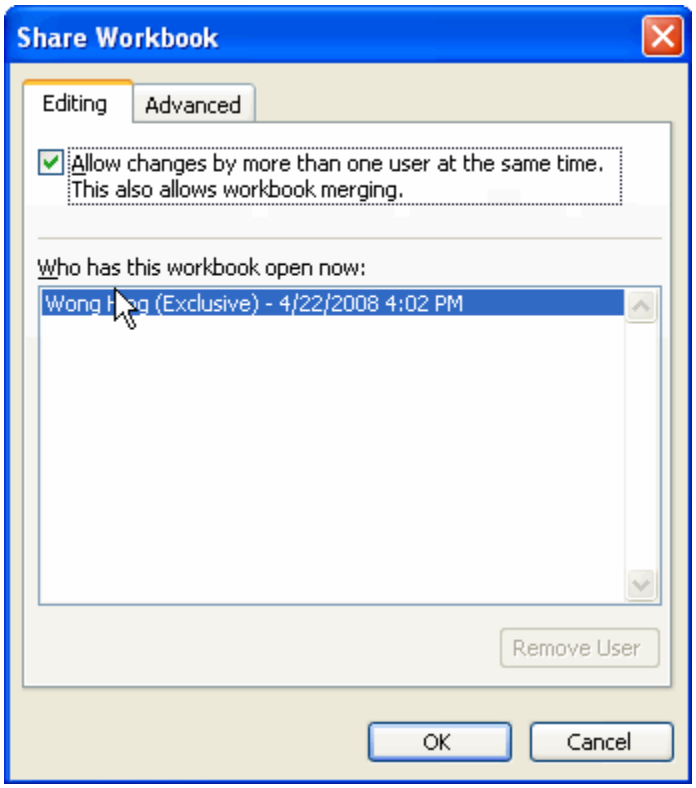
If a user tries to opena Workbook that is already open, then they normally get a message saying that the File is locked by a certain user and would you like to open the file in Read only mode. However, you can open aworkbook in shared mode by following these steps.

Note: To utilize this feature, make sure your computer is running in the network environment.

To share an Excel file

- Open the Excel file that you want to share.

- From the **Tools** menu and choose **Share Workbook**.



- From the **Share Workbook** dialog box displayed, in the **Editing** tab, check the **Allow changes by…** check box.

- Click **OK**. This allows other people to use your Excel workbook whilst you are working on it.

To know the advanced share workbook features

- Open the Excel file that you want to share.

- From the **Tools** menu and choose **Share Workbook**.

- From the Share Workbook dialog box displayed, click the **Advanced**tab.

There are three areas that you can change:

1. Track Changes.

Microsoft Excel allows you to store over 32000 days worth of changes to your Excel file, however, there is a catch. All of that information is stored in your file and consequently your file will grow exponentially. Most organisations generally work on a maximum of 30 days (the default). However the value entered simply depends on your workbooksrequirements. You can choose the second option - Don't keep change history. This simply ensures no changes are maintained.

2. Update Changes.

This function simply allows you to define how often the spreadsheet changes are updated. The most common element users use is the Update Every 15 minutes. What this does is to force a save and filter through the data to all the users. One point to consider is that if you workbook is relatively large and you are working on a slow computer you may want to increase that time to 30 minutes.

3. Save Changes.

This defines whose changes will override who's. There are two optionsavailable:

- Download Pdf
- Msn
- Youtube Videos
- Excel File
  - Ask me which changes win
  - The changes being saved win

Which option you choose really depends on the type of workbook you have created.

Another critical issue you need to consider is if somebody disables the**Excel Shared Workbook** function. If this occurs, when you try to save your workbook you will be required to save it somewhere else or lose your work. This is one of the downsides to the Share Workbook function.

Excel Drop Down List - How to Create It

Microsoft Excel 2003 allows you to build your own **Excel drop down list**!

Well, this feature is really cool.

Have you ever been in a situation where you were building a template in Microsoft Excel 2003 and it would have been really useful to actually have a drop down list so that your users could choose from a preset list, rather than them simply typing in their own values?

This tutorial show you how to create the drop down list in Excel.

To create an Excel drop down list

- Open a new Excel workbook. On the first worksheet (Sheet1) enter the following data.

Cell A1 - Title
Cell B1 - Full Name

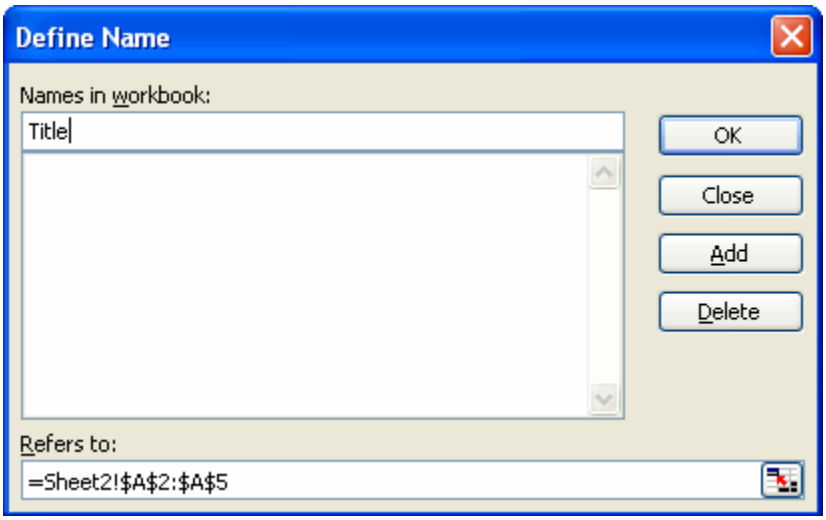
- Click on the second worksheet (Sheet2) in your workbook. Enter the following data.

Cell A1 - Title
Cell A2 - Mr

Cell A3 - Miss
Cell A4 - Mrs
Cell A5 - Ms

- Then select the cell range A2 to A5. We are going to give a name for this range of cell.

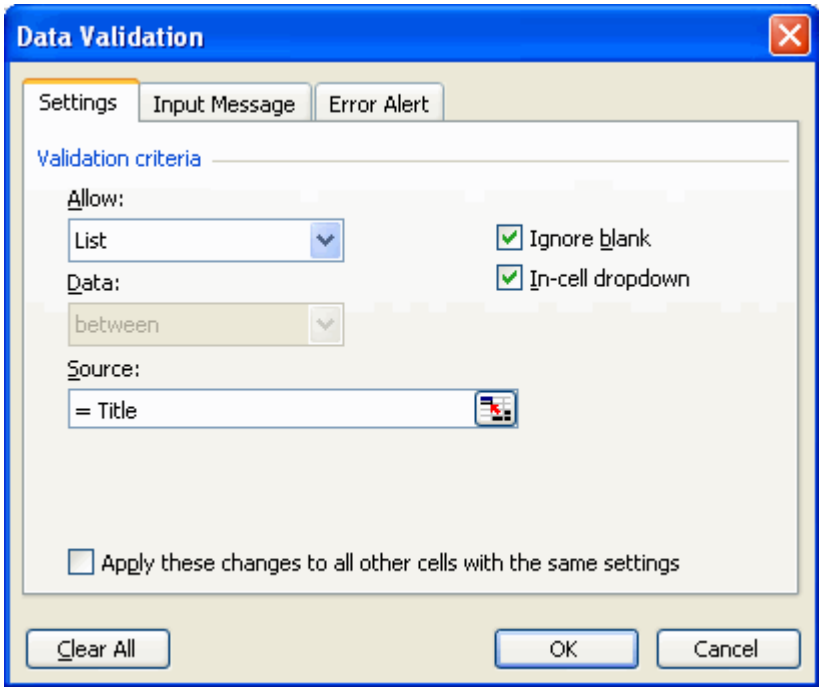
- From the **Insert** menu choose the **Name** option from the menu and click **Define**.



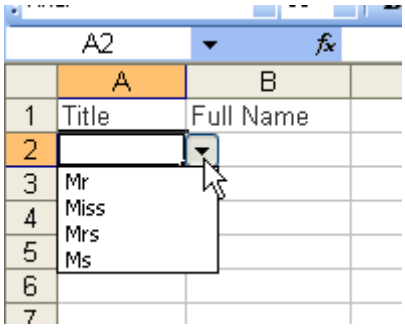
- From the **Define Name** dialog box displayed, in the **Names inworkbook:** text box simply type in the name Title and click the **OK**button.

- Now, return to the first worksheet (Sheet1). We will create a drop down list in cell A2 so click on cell A2.

- From the **Data** menu, click on **Validation**. This will open the **Data Validation** dialog box.



- Under the **Settings** tab, in the **Allow:** drop down list, choose the **List**option.
- In the **Source:** text box, typing in **= Title** (This is to define the name Title as the range).
- To complete the process, click the **OK** button.
- Return to the cell A2 and you will now see a drop down box. If you click on the arrow you will see the results from your second sheet.



Note: If you do not want your range for your list to be on the sameworksheet, then you must name the range.

The Excel Time Function

The **Excel Time Function** – What its use for? The **Excel Time function** is to display the time in a cell.

Excel allows you to manipulate dates and times and perform calculations on them. If you type a date or time (e.g. 13/3/08 or 9:28) directly into a cell Excel should recognise

it as such. The program will normally align it to the right of the cell and display it in the formula bar in a standard format (e.g. 13/03/2008 or 9:28:00 AM).
The **TIME Function** Syntax:
TIME (Hour, Minute, Second)
Hour is a number from 0 (zero) to 23 representing the hour.Minute is a number from 0 to 59 representing the minute.Second is a number from 0 to 59 representing the second.
Examples:
TIME(12, 0, 0) is equivalent to 12:00:00 p.m.
TIME(16, 48, 10) is equivalent to 4:48:10 p.m.

To add and subtract times

- To add 1 hour, 35 minutes, 10 seconds to a time in A1, use the function **=A1 + TIME(1,35,10)**

- To subtract 1 hour, 35 minutes, 10 seconds from a time in A1, use the function **=A1 - TIME(1,35,10)**

Note: You can add times using the **=SUM** worksheet function. Just enter all of your times as HH:MM:SS, and then use **SUM** function to add them up.

The Excel Date Function

In Excel, the Date Function is to display the date in a cell.

To display the current time or date in a cell, use the **NOW()** function. Just type **=NOW()** in the cell and it will display the current data and time.
The **DATE Function** Syntax:
DATE (Year, Month, Day)
To add and subtract dates

- In the cell A1, type a date such as 1/2/08.

- In cell A2, if you wish to add 8 days to cell A1, use =A1+9, which gives 9/2/08.

- In cell A3, if you wish to subtract 5 days to cell A1, use =A1-5, which gives 4/1/08.

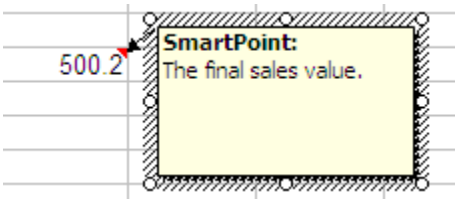
Excel Comment – Why and how to add and manipulate it in Excel spreadsheets?

Excel Comment is basically short notesthat can be inserted into any cell in Excel. You cannot see it if you do not click on the comment. It's useful for reminders, notes for others, or for cross-referencing other workbooks.
Adding comment toworksheets cells are a great way to explainthe cell contents, formulas, offer tips to users or other data in the spreadsheet.
Basically there are three ways to add a comment:
1) Using Menu bar
2) Using mouse right-click

3) Using Reviewing toolbar (not explain here)

To insert a Comment using menu bar method

- Select the cell in which you want the comment.
- From the **Insert** menu, click on **Comment**. You can see something like this:



- Type your comment where the cursor is flashing.
- Text will wrap automatically. If you want to start a new line, press the**Enter** key.
- When finished, click any cell outside the comment box.

To insert a Comment using right-click method

- Point to the cell in which you want the comment.
- Right-click on the cell and click **Insert Comment**.
- Type your comment where the cursor is flashing.
- When finished, click any cell outside the comment box.

To display a specific Comment

- Right-click the cell which contains the comment.
- Choose **Show/Hide Comment**.

To hide the Comment

- Right-click the cell which contains the comment.
- Choose **Hide Comment**.

To edit the Comment

- Right-click the cell which contains the comment.
- Choose **Edit Comment**.
- Retype your comment.

To delete the Comment

- Right-click the cell which contains the comment.

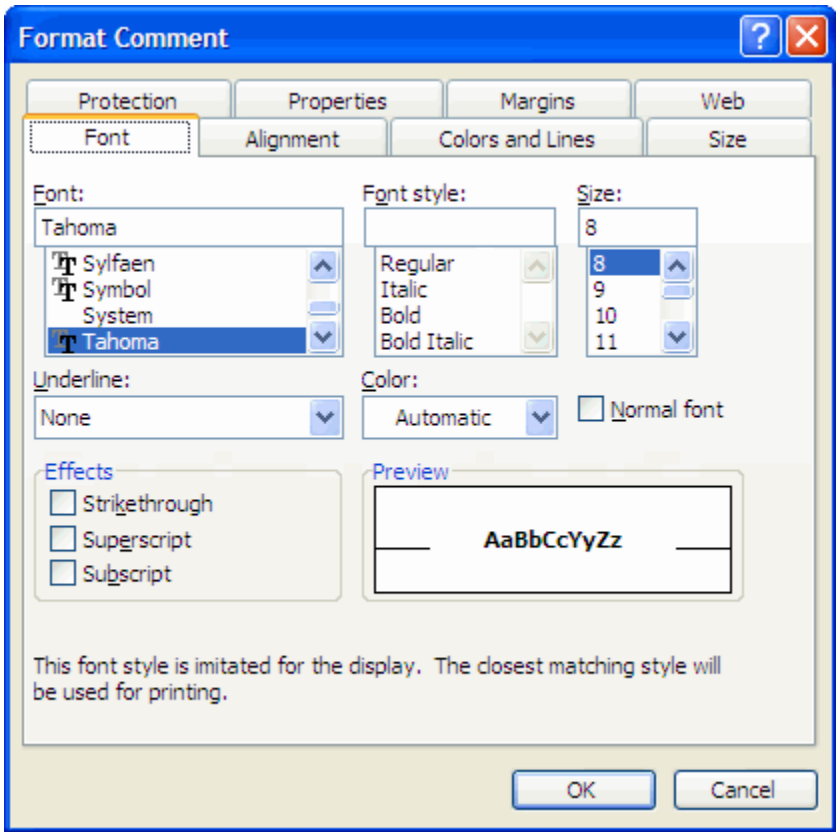
- Choose **Delete Comment**.

To change the Comment Shape

- Right-click the cell which contains the comment.
- Choose **Edit Comment**.
- Click on the border of the comment, to select it.
- On the **Drawing** toolbar, click the **Draw** icon, point to **Change AutoShape**, and choose a category.
- Click on a shape to select it.
- When finished, click outside the comment.

To change the others Comment attribute

- Right-click the cell which contains the comment.
- Choose **Edit Comment**.
- Click on the border of the comment, to select it.
- From the **Format menu**, click **Comment**.



 From the **Format Comment** dialog box displayed, click on the specific tab to change the necessary settings.

 You can change the comment font and background color, font size and effects, alignment, margin, etc.

 When finish, click **OK**.

Excel 2003 Data Analysis Tools: Sort Data, Subtotals, Pivot Tables and What-If Analysis

Sorting and filtering lists: With the information you have in a list, you can sort and display data that meet certain criteria, insert formulas to calculate subtotals, and create summary tables.

Subtotals: Excel can quickly goes through the whole table and insertsrows and adds totals for the column that you specify.
PivotTable: It is a quick way toanalyze data such as summing up data in a rectangular table shape when you have more than one category to summarize upon.
What-If Analysis: The ability to assist in decision making with dynamic models.
A *dynamic model* uses formulas that instantly recalculate when you change values in cells that are used by the formulas.

Excel Styles and Custom Formatting

When you format a cell in a worksheet, you can define cell shading, font color, font, font size, borders, and much, much more. In short, there are many definitions that can be set for a single cell.
You save all the formatting you have customized. The main limitation is that all custom formatting is only saved in the current workbook. Without defining a name for the format, it will be difficult for you to find and reuse it.
Furthermore, when using this method, you cannot save definitions such as font, patterns, borders and any of the wide variety of formatting options in the **Format Cells** dialog box.
Then the Excel **Styles** are different!
Changing the definitions of the style will modify the default format of text or numbers in the workbook.

- Download Pdf

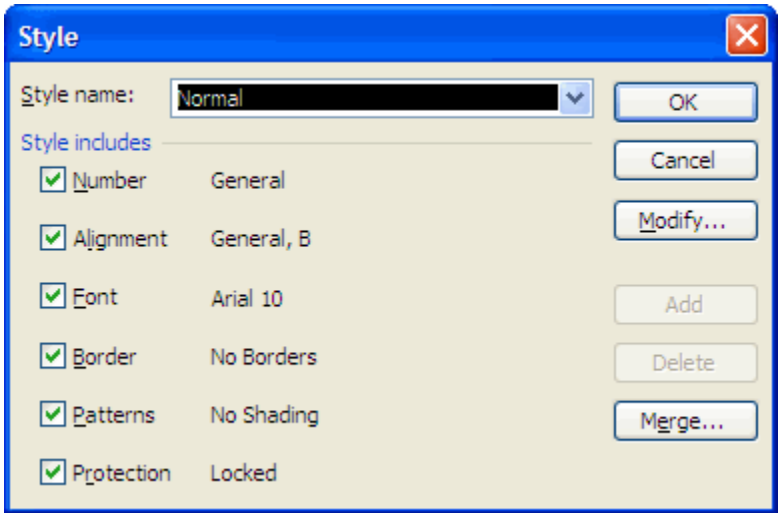
- Worksheets

- Msn

- Youtube Videos

To change the default Style in a workbook

- From the **Format** menu, click **Style**.



- From the **Style** dialog box displayed, in the **Style name** box, select**Normal**.

- Click **Modify** button.

- From the **Format Cells** dialog box displayed, do the necessaryadjustments.

Number tab: Set the number format that appears in the cells.
Alignment tab: Change the vertical and horizontal alignments of the text/number in the cells.
Font tab: Change the font pattern, style, color of the text/number in the cells.
Border tab: Add or remove the border of the cells.

- Click **OK**.

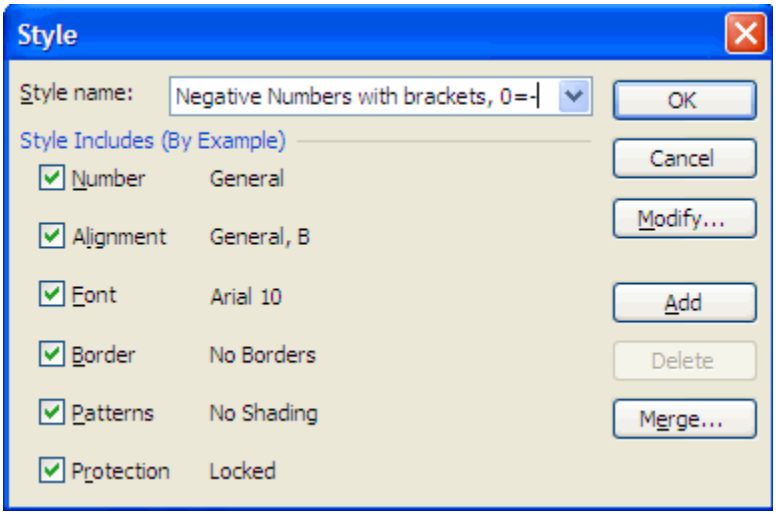
The formatting suggested by default in the workbook allows you to enter both text and numbers into cells. Formatting a cell for text only by selecting the **Text** format from the list of standard formats appearing in the **Category** box in the **Number** tab of the **Format Cells** dialog box will allow only text and not numbers to be displayed in the cell. The opposite is also true. If you format a cell for numbers only, you will not be able to display text in the cell.

Actually, in the **Style** dialog box, you can create a wide range of complex styles and save each one separately with a unique name. These styles can then be applied repeatedly.
The example below shows you how to format a number so that a negative number displayed in brackets and zero (0) is replaced with a dash (-). Choose the font and font size.

To create and save custom styles

- From the **Format** menu, click **Style**.

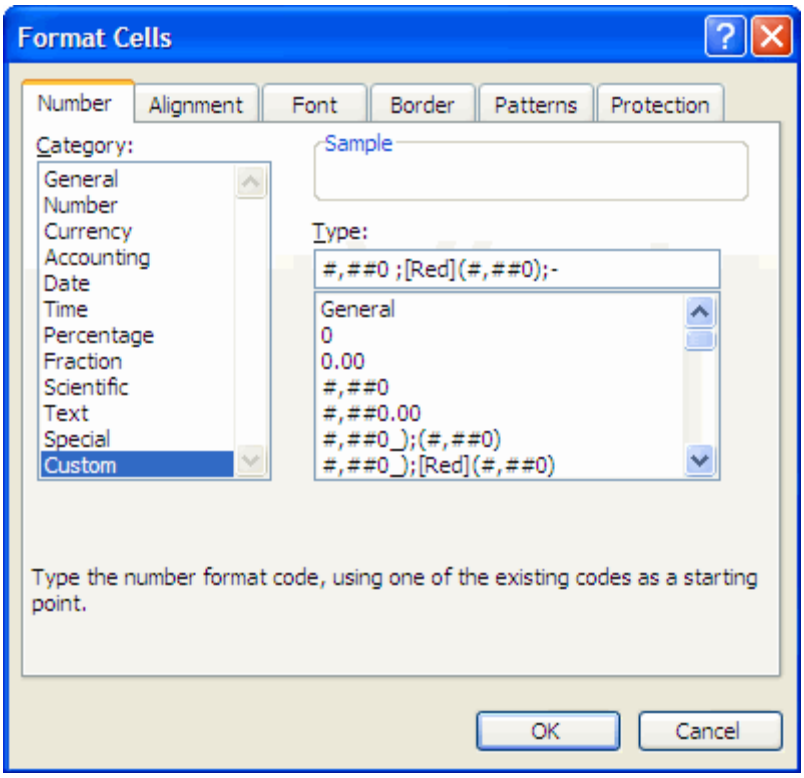
OR press **Alt+'** .



- From the **Style** dialog box displayed, in the **Style name** box, enter**Negative Numbers with brackets, 0=-**.

- Click **Modify** button.

- From the **Format Cells** dialog box displayed, select the **Number** tab, and in the **Category:** box, select **Custom**.In the **Type:** box, change and type in the following number format **#,##0 ;[Red](#,##0);- ;**



- Select the **Font** tab.
- In the **Font:** box, select Arial. In the **Font style:** box, select Regular, and in the **Size:** box, select 10.
- Click **OK**.
- In the **Style** dialog box, click **OK**.

Use the SUMIF Function Correctly

In Excel 2003, the**SUMIF** function adds all numbers in a range of cells, based on a given criteria.

Sometimes you may need to use only certain values inside a range in a summation, based on a defined condition. Using Microsoft Excel 2003, this can be calculated with the **SUMIF**function.

The **SUMIF** function can also use another range of cells to determine whether or not the condition is met.

The syntax for the **SUMIF** function is:

=SUMIF(range,criteria,sum_range)

range is the range of cells you want to evaluate (apply the *criteria*against).

criteria is the criterion you want to meet to evaluate the number.

sum_range are the numbers you want to actually sum.

To use the SUMIF function (example)

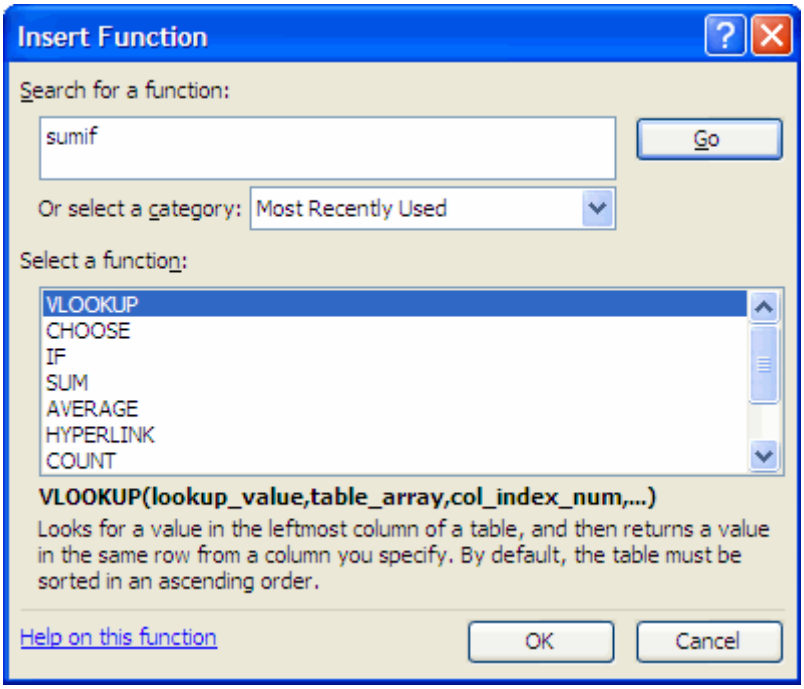
- Create a worksheet as shown below:

	A	B	C
1	Salespeople	Sales Volume	
2	Smith	35200	
3	Darly	28500	
4	Thomas	32000	
5	Darly	17950	
6	Smith	22100	
7	Thomas	33500	
8	Smith	28150	
9			
10	Smith's total sales:		
11	Total sales > 30000:		
12			
13			

Now, we will use this worksheet to calculate the Smith's total sales.

- Click on the cell B10, the cell that will displays the result.

- From the **Insert** menu, click on **Function**.

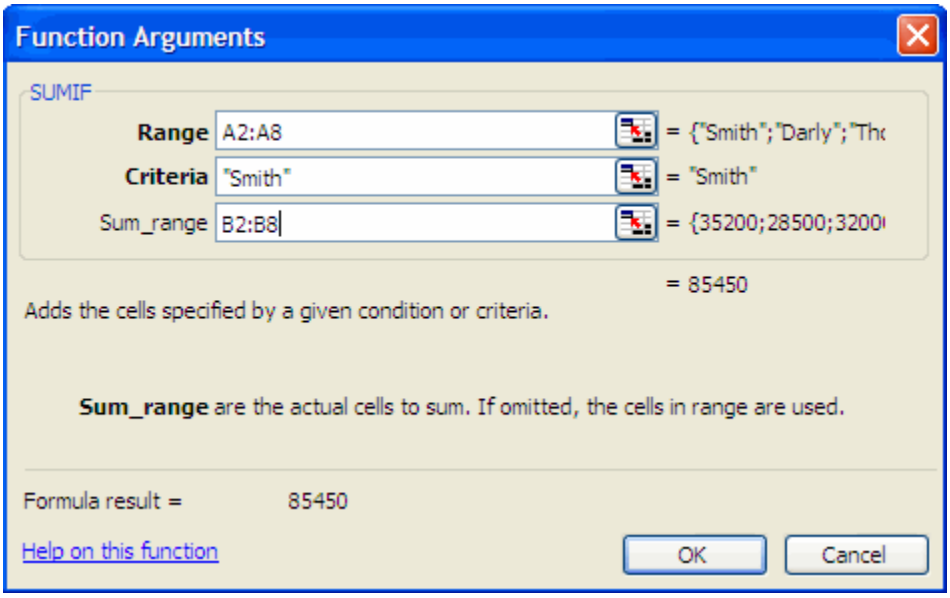


- From the **Insert Function** dialog box displayed, under the **Search for a function:** box, type in sumif and click the **Go** button.

- In the **Select a function:** box, make sure you select the **SUMIF** and click **OK**.

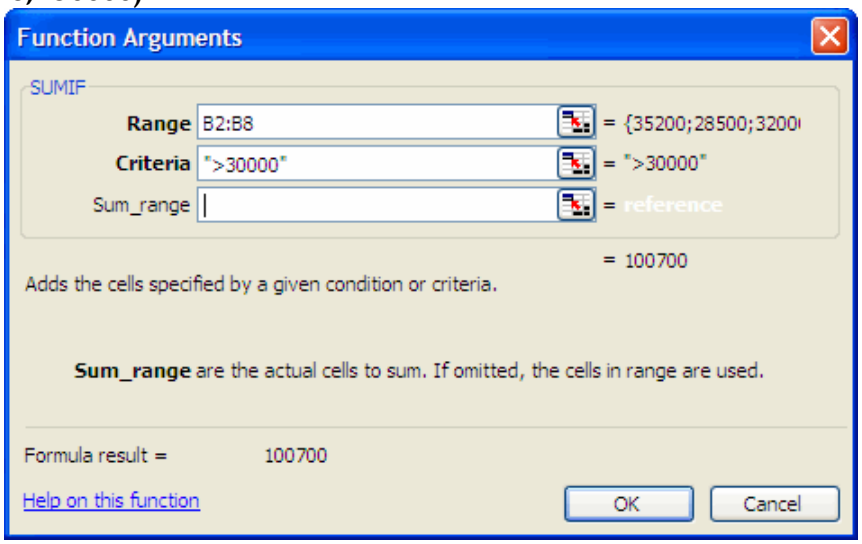
- From the **Function Arguments** dialog box displayed, do the followings:

Range: Select or type in A2:A8 as we want to evaluate within this ranges that contains the name Smith's.
Criteria: Type in Smith.
Sum_range: Select or type in B2: B8 as this is the ranges that we want to add up the total sales by Smith's.



- Click **OK**. This produces the result 85450. That is 35200+22100+28150.

Note: To find the sum of the sales that exceed 30000, use this function:
=SUMIF(B8:B8,>30000)



This produces the result 100700 (35200+22100+28150).

Microsoft PowerPoint

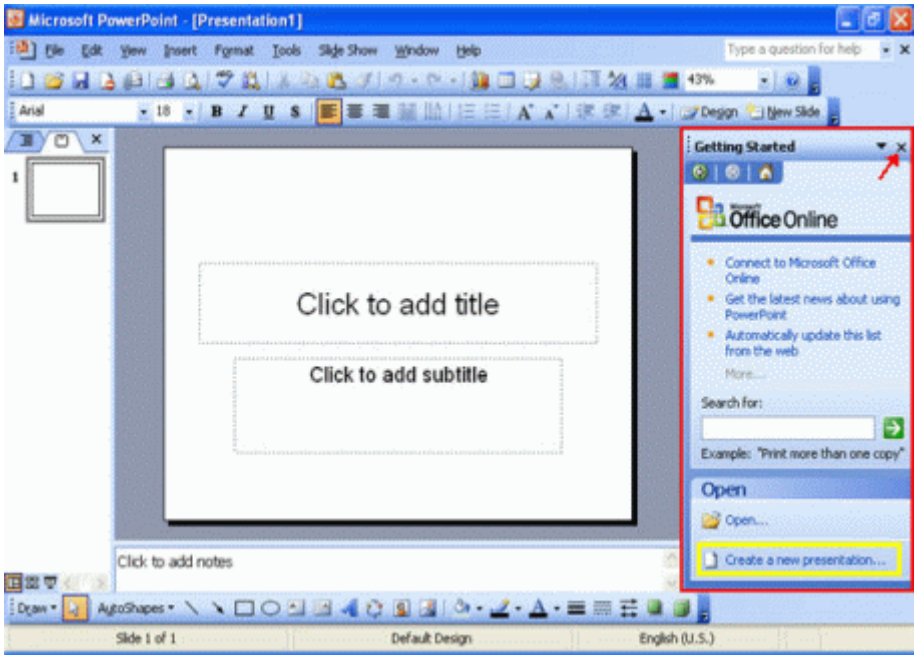
The Microsoft PowerPoint is one of the Microsoft Office suites of programs. It primary function is to produce **presentation materials**.

To start a PowerPoint program

 Click on the **Start** button, point to **Programs**, follow by **Microsoft Office** and click on **Microsoft Office PowerPoint 2003**.

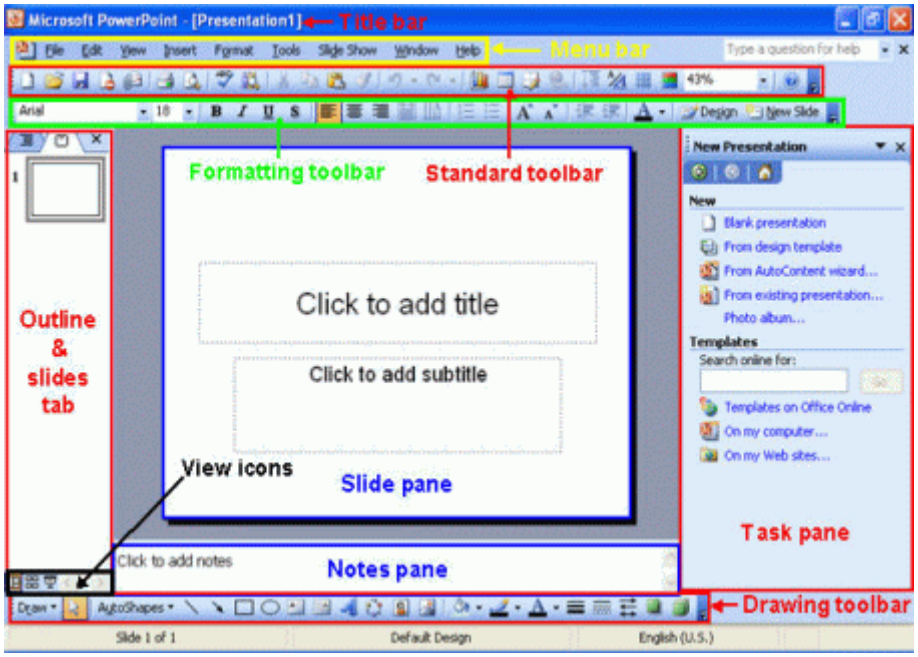
Note: For previous version of Office - Click on the **Start**button, point to**Programs** and click on **Microsoft PowerPoint**.

 Immediately you will see the screen shown below. The right hand side**Getting Started** task pane provides help to you.



 If you are not using it, you can click on the **Close** icon to close it. You also can start by clicking on **Create a new presentation…** at the bottom of the task pane.

 The PowerPoint 2003 screen elements:



To enter text into a presentation

 From the PowerPoint slide pane, there is 'box' that labeled 'Click to add title'. Just simply click and enter the text there.

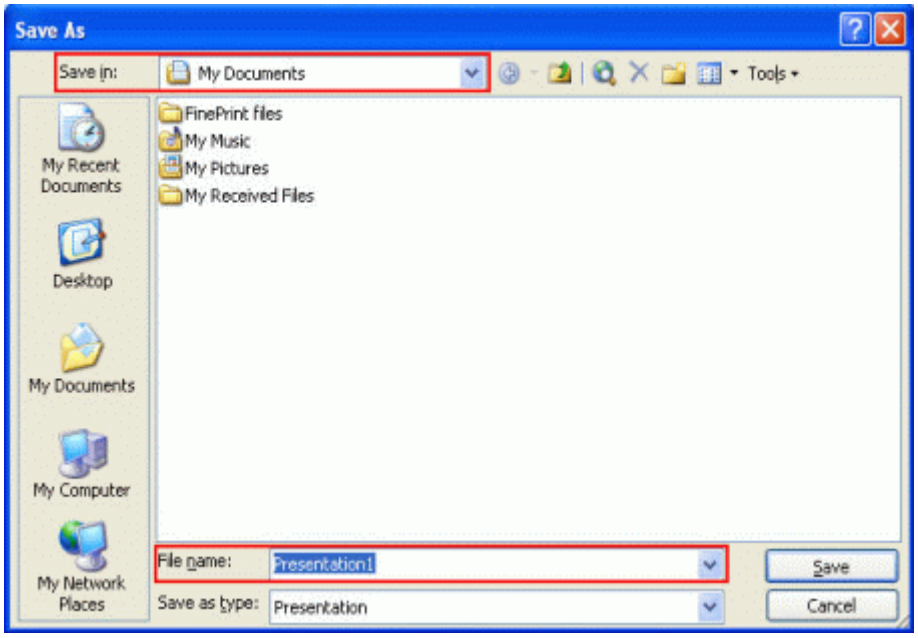
- For example, you may enter “This is my first presentation.”
- Then click on ‘Click to add subtitle’ and you also can enter some text there.

Saving and Closing a presentation

This feature allows you to store new or existing presentations on disk. If you not save the file, you will be unable to view the presentation in the future. Once saved, you can re-open the file for viewing or editing.

To save a presentation

- From **File** menu, click **Save**.



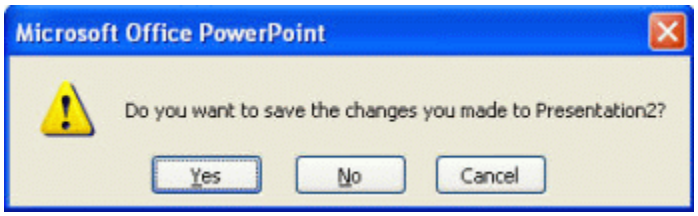
- If it is a new file, the **Save As** dialog box displayed, ensure that you are located in the folder/disk drive of your choice by clicking the arrow to the right of the **Save in:** drop down box and navigating to your required location.
- Enter the file name in the **File name:** text box. The default file name is Presentation1, you can use it or type in a new file name.
- Let say we key in First presentation for the file name, click on the**Save** button to save. Note: Now the presentation is saved to My Documents folder.

To close a presentation

- From the **File** menu, click **Close**

OR click **Close Window** icon.

 If unsaved changes have been made to your presentation the dialog box below is displayed, giving you the chance to save the presentation prior to closing.



 Click **Yes** to save the presentation before closing
OR click **No** to close without saving changes
OR click on **Cancel** to cancel the operation.

To exit Microsoft PowerPoint

 Click on the **Close** icon displayed on the top-right corner of the screen.

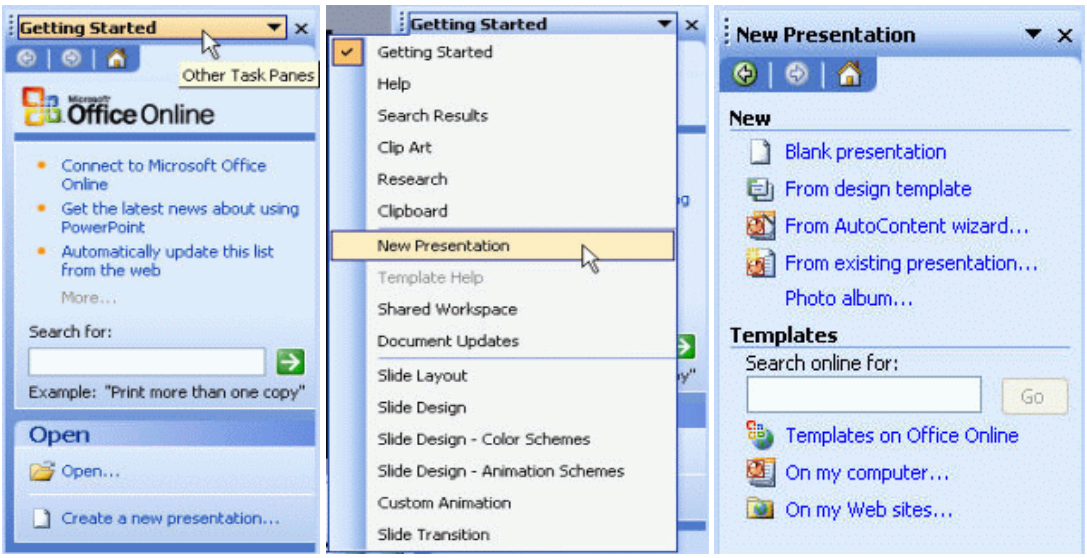
Creating PowerPoint Presentation Slide ...Where to Start?

The answer is **Task Pane**. Once you open the PowerPoint presentation program, the task pane is display along the right hand side of the screen.

The **Task Pane** lists some of the most common tasks you may want to accomplish in PowerPoint. The taskpanes are descriptive to help you quickly locate the task you want.

To display Task Pane (if it has been closed)

 From the **View** menu, click **Task Pane**.



To switch to other Task Panes

 Click the **Other Task Panes** down arrow and select another Task Pane from the menu.

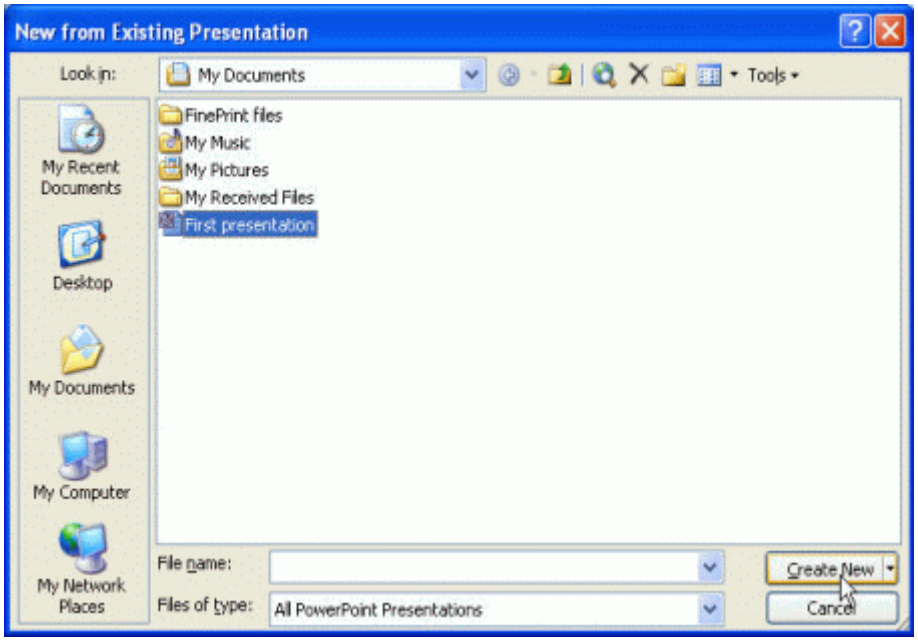
To display the New Presentation Pane

- From the **File** menu, click **New**.

To open an existing presentation

- From the **New Presentation** task pane, click **From existing presentation…**to display the **New from Existing Presentation** dialog box, and select the file you want.

- For example, you select the file First presentation created in topic 1.



- Click on **Create New** button. The presentation is opened and you can do the necessary modifications.

To create a new blank presentation

- Click the **Blank Presentation** in the **New Presentation Pane**.

OR click the **New** icon on the **Standard** toolbar.

- This will display the **Slide Layout** pane that allows you to choose the layout of your slide. The layouts contains text, content and both text and content.

- Click on the particular layout and begin create the slide.

The Outline and Slides Tabs

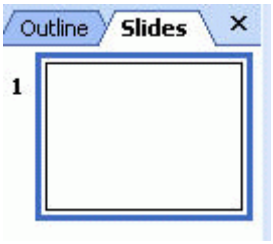
The **Outline** Tab presents a title and text outline of each slide in your presentation. Slides can be edited in the Outline area or directly on the slide. If you prefer to edit your text and slides in the Outline area, the Outlining toolbar is dedicated to working in this view.

To change the size of the Outline and Slides Tabs

- Click in the Slides tab or Outline tab area.

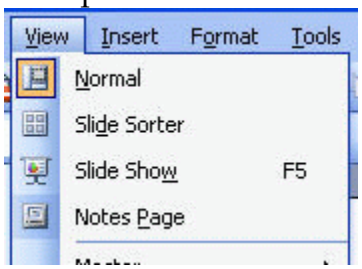
- Click the down arrow next to the **Zoom** box on the **Standard** toolbar and specify the percentage you want.

- The Slides Tab displays all slides in your presentation in thumbnailsize. The Slides tab area is an easy way to navigate your presentation. You can jump to a slide just by clicking on it.



4 Different PowerPoint Views

To see the different PowerPoint views, from the **Menu** bar, click on the**View** and you will see 4 types of view. Click on the particular view to see the effect.



1) Normal View The Normal View is the default view in PowerPoint. All slide editing is performed in this view. The normal view comprises the Slide Pane, Outline and Slides tabs and the Notes Pane.

2) Slide Sorter View The Slide Sorter view displays all slides in your presentation as thumbnails. This view is useful to reorder, add, or delete slides. You an also preview animation effects applied to each slide.

3) The Slide Show View The Slide Show view allows you to view your presentation as a slide show. Your presentation is displayed as a full screen and you can view applied animations.

4) The Notes View The Notes Page view displays how notes pages will print. A notes page contains a smaller version of the slide and notes entered from the Notes Pane underneath the slide.

The PowerPoint Toolbars and Slide Manipulations

PowerPoint has 13 toolbars, including the **Task Pane**. By default, the Standard, Formatting, and Drawing toolbars are displayed.

The other toolbars are used only for specific functionality in PowerPoint.

This page will let you know the most commonly used toolbars and its function.

To show a toolbar

- From the **View** menu, choose **Toolbars** and select the toolbar you want to display (you will see a check mark beside a toolbar when it is visible)

To hide a toolbar

- From the **View** menu, choose **Toolbars**

- Select the toolbar you want to hide (you will not see a check mark beside a toolbar when it is hidden).

The Standard Toolbar

The commonly used action is represented by an icon of the **Standard** toolbar. When you put your mouse pointer over an icon, it is highlighted and a descriptive wording appears. Click the icon/action you want to apply to your slide objects.

The icons on the **Standard** toolbar and it function:

Icon	Function
New	To start a new presentation
Open	To open a presentation
Save	To save a presentation
Permission	To sets permissions for opening or changing a presentation
E-mail	To send the presentation as an e-mail
Print	To print the presentation
Print Preview	To change the display to print preview
Spelling	To start the spell checker
Search	To display the Basic Search Pane
Cut	To cut selected text or object to the Clipboard
Copy	To copy selected text or object to the Clipboard
Paste	To paste the last item from the Clipboard
Format Painter	To copy formatting (for duplication purpose)
Undo	To undo the last action
Redo	To redo the last undo action
Insert Chart	To start the Chart Wizard

Insert Table	To insert a table
Table and Borders	To display the Table and Borders toolbar
Insert Hyperlink	To insert a hyperlink
Expand All	To expand the title and text for all slides on the Outline tab
Show Formatting	To show or hide character formatting
Show/Hide Grid	To show or hide gridlines
Color/Grayscale	To show the presentation in color, black and white, or grayscale
Zoom	To zoom the Slide, Outline tab area, or Slides tab area

The Formatting Toolbar

The **formatting** toolbar are located near to the top of your screen as shown here. Each toolbar icon on the toolbar has specific function that allows you to change the effects of the objects in your PowerPoint slides.

The icons on the **Formatting** toolbar and it function:

Icon	Function
Font	To select font styles from the drop-down list
Font Size	To select a font size from the drop-down list
Bold	To apply bold formatting to selected text
Italic	To apply italic formatting to selected text
Underline	To apply underline formatting to selected text
Shadow	To apply shadow formatting to selected text

Align Left	To align text or inline objects to the left
Center	To align text or inline objects to the center
Align Right	To align text or inline objects to the right
Distributed	To align text or inline objects distributed across the whole line
Change Text Direction	To change the text direction (horizontal to vertical)
Numbering	To add or remove numbering from a selected paragraph
Bullets	To add or remove bullets from a selected paragraph
Increase Font Size	To increase font size
Decrease Font Size	To decrease font size
Decrease Indent	To decrease the paragraph indent
Increase Indent	To increase the paragraph indent
Font Color	To change the font color with a drop-down list
Slide Design	To display the Slide Design Task Pane
New Slide	To insert a new slide

To insert a new slide

- From the **Insert** menu, click **New Slide**.

OR click the **New Slide** icon on the **Formatting** toolbar

To insert a duplicate slide

- From the **Insert** menu, click **Duplicate** Slide.

Copy and Paste Slides

You can copy and paste slides in **Normal** View with the Outline and Slides tabs or in **Slide Sorter** view.

To copy slides with the Outline tab

- Click the slide icon of the slide you want to copy.
- Click the **Copy** icon on the **Standard** toolbar.

OR right-click on the slide icon and select **Copy**.

To paste the slide

- Click the slide icon after which you would like the newly copied slide to appear.
- Click the **Paste** icon on the Standard toolbar.

OR right-click on the slide icon and select **Paste**.

Note: You also can copy and paste the slide with the **Slides** tab or in the **Slide Sorter** view.

Deleting Slides

You can delete slides in **Normal** View with the Outline and Slides tabs or in **Slide Sorter** view.

To delete slides with the Outline tab

- Click the slide icon of the slide you want to delete.
- From the **Edit** menu, click **Delete Slide**.

OR right-click on the slide icon of the slide you want to delete and select **Delete Slide**.

To delete slides with the Slides tab

- Click the slide thumbnail of the slide you want to delete.
- From the **Edit** menu, click **Delete Slide**.

OR right-click on the slide thumbnail of the slide you want to delete and select**DeleteSlide**.

To delete slides in Slide Sorter view

- Click the slide thumbnail of the slide you want to delete.
- From the **Edit** menu, click **Delete Slide**.

OR right-click on the slide thumbnail of the slide you want to delete and select**Delete Slide**.

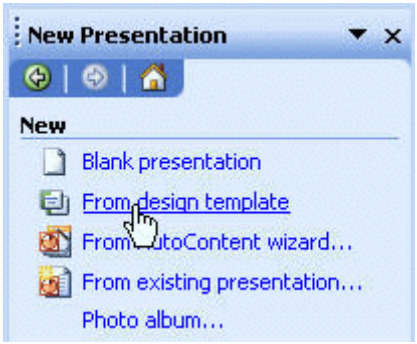
PowerPoint Design and AutoContent Wizard

PowerPoint **design template** contains color schemes, slide and title masters with custom formatting and styled fonts, all designed to create a particular look.

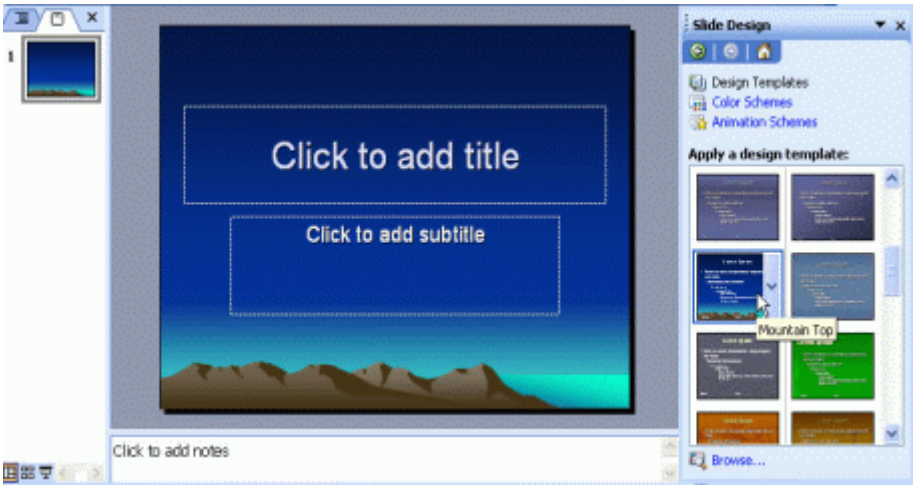
After you apply a PowerPoint design template, each slide you add has the same outlook. You can use the New Presentation Pane to create a new presentation from adesign template.

To create a new presentation from a design template

- Click the **From design template** in the **New** Presentation Pane.



- Immediately you will see design templates available below the pane. For example, if click on *Mountain Top* template, you will see the slide as follow:



- The background of the slide is included and you just need to insert the text as you wish.

Looking for free PowerPoint design templates, click here.

PowerPoint AutoContent Wizard

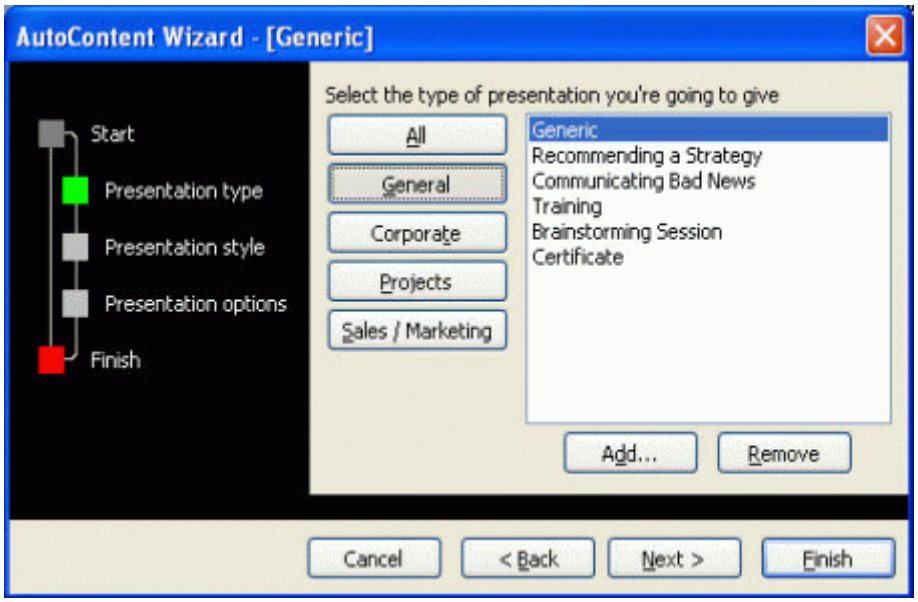
The **AutoContent Wizard** allows you to create a presentation based on suggested content and design. There provides the idea for your presentation so you just need to modify the suggested

idea or you can add your own points.

To create a new presentation using the AutoContent Wizard

- Click the **From AutoContent Wizard…** in the **New** Presentation Pane.

- From the **AutoContent Wizard** dialog box displayed, click **Next** to continue.



- You need to select a type of presentation that you wish to create. If you click on the **All** button, then you can use the scroll bar to move down the list and then select the type of presentation that you are interested in.

Note: Some options displayed may not be installed on your system and you may ask to insert the Microsoft Office installation CD to install it before use.

- Click **Next** button to continue.

- The next step is to decide how you will use your presentation once it has been produced. By default, **On-screen presentation** was selected.

- Click **Next** button to continue working through the Wizard.

- You can enter a presentation title and footer.

- Click on the **Next** button to continue.

- Click **Finish** to complete the AutoContent Wizard.

 From this point you need to open each slide and using the guidelines supplied, modify the content to meet your requirements and needs.

PowerPoint Slide Manipulations

PowerPoint Slide Layout

A PowerPoint **slide layout** refers to how placeholders are arranged on a slide. Each slide layout contains a different combination of text and content placeholders. Typically a slide is divided into title and text placeholders.

To display the Slide Layout Pane (if it has been closed)

 From the **Format** menu, click **Slide Layout**.

To apply a text layout to a slide

 From the **Slide Layout** Pane, *Text Layouts* section click on the particular layout you want.

 Text Layouts normally contains the text only. Those layouts included Text Slide, Title Only, Title and Text, Title and 2-Column Text, Title and Vertical Text, and Vertical Title and Text.

To apply a content layout to a slide

 From the **Slide Layout** Pane, *Content Layouts* section click on the particular layout you want.

 Content layouts can have Charts, Clip Art, Pictures, Tables, Diagrams or Organization Charts, or Media Clips.

To apply text and content layouts to a slide

 From the **Slide Layout** Pane, *Text and Content Layouts* section click on the particular layout you want.

 Text and Content layouts have the text and also the charts, tables, etc in the slide.

To apply other layouts to a slide

 From the **Slide Layout** Pane, *Other Layouts* section click on the particular layout you want.

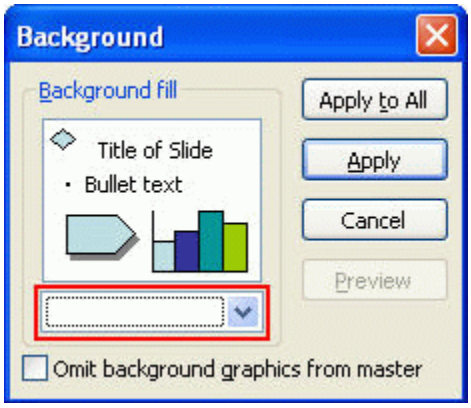
 Other layouts contain those layout that is different from the text, content, and text and content layouts.

PowerPoint Slide Background

Backgrounds can be applied to the PowerPoint slides, handouts, and notes. The Background options that you can change include colors,gradients, textures, patterns, and pictures.

To select a Slide Background Color

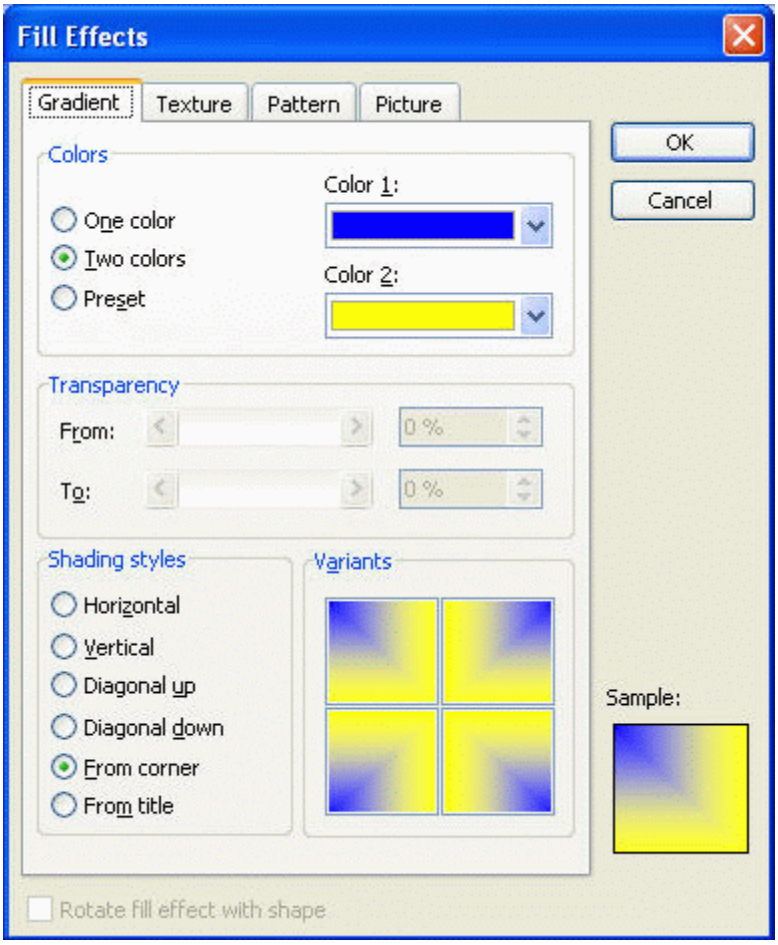
- From the **Format** menu, click **Background**.



- Click the down arrow and select the color you wish to apply to the slide background.
- Click on **More Colors** to choose from a wider selection of colors.

To select a Slide Background Fill Effect

- From the **Format** menu, click **Background**.
- Click the down arrow and select **Fill Effects**. This will open a **Fill Effects** dialog box.
- Click on the Gradient, Texture, Pattern, or Picture tabs to apply the fill effect. Choose the colors as you like.



- When finish, click **OK**.
- It will back to the **Background** window, there are 4 buttons:

Apply to All	To apply the formatted background to all slides.
Apply	To apply the formatted background to the current slide only.
Cancel	To cancel the formatted background.
Preview	To preview what the slide background will look like.

- Click on the button that suit your needs.

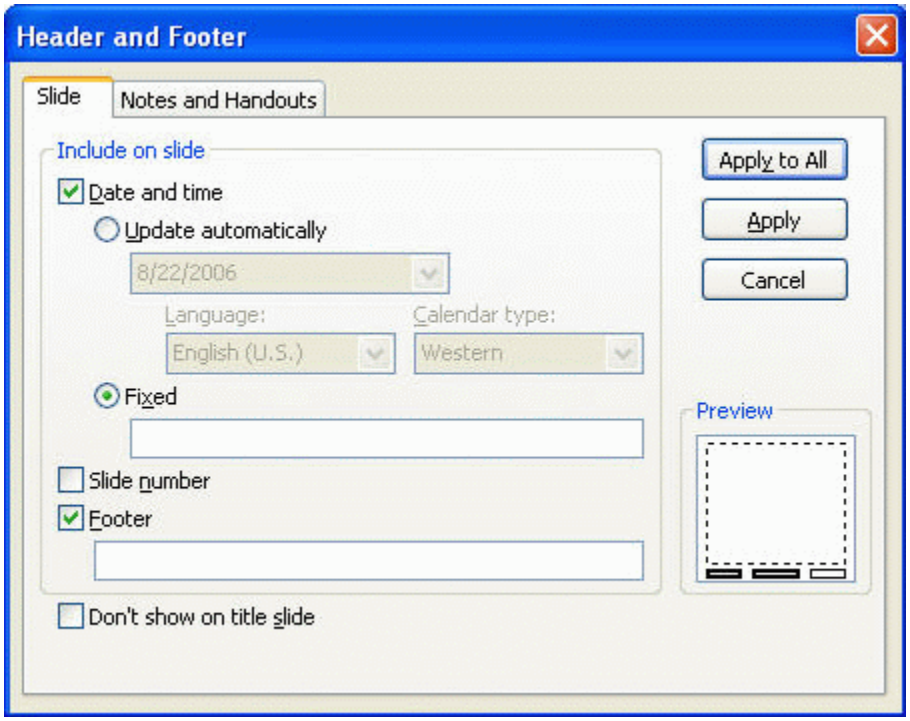
To get some free PowerPoint slide background, **click here.**

PowerPoint Slide Headers and Footers

Headers and footers consist of the text, slide or page number, and date you want at the top or bottom of your slides. You can use headers and footers on single slides or all slides.

To insert slide Headers and Footers

- From the **View** menu, click **Header and Footer**. This will display the**Header and Footer** dialog box.



- To insert the date and time, tick the **Date and time** check box.
- To add a slide number, tick the **Slide number** check box.
- If you choose to insert the footer, make sure the **Footer** check box ischecked and type in your desired text.
- Click **Apply** to apply to the current slide. Click **Apply to All** to apply to all slides.

Bullets and Numbering

Bullets and Numbering is useful tool to divide your slide into points. Bullets and numbering come in different styles, sizes, and colors that you can apply.

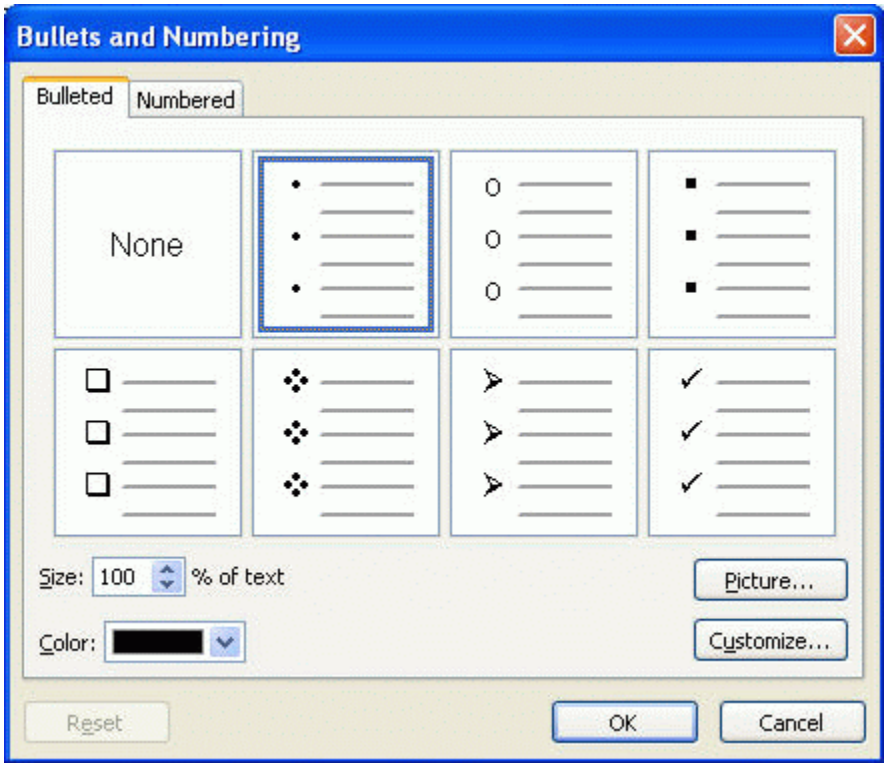
To add or remove bullets

- Highlight the paragraph/s you want to add or remove bullets from.

- Click the **Bullets** icon on the **Formatting** toolbar.

To change bullet style

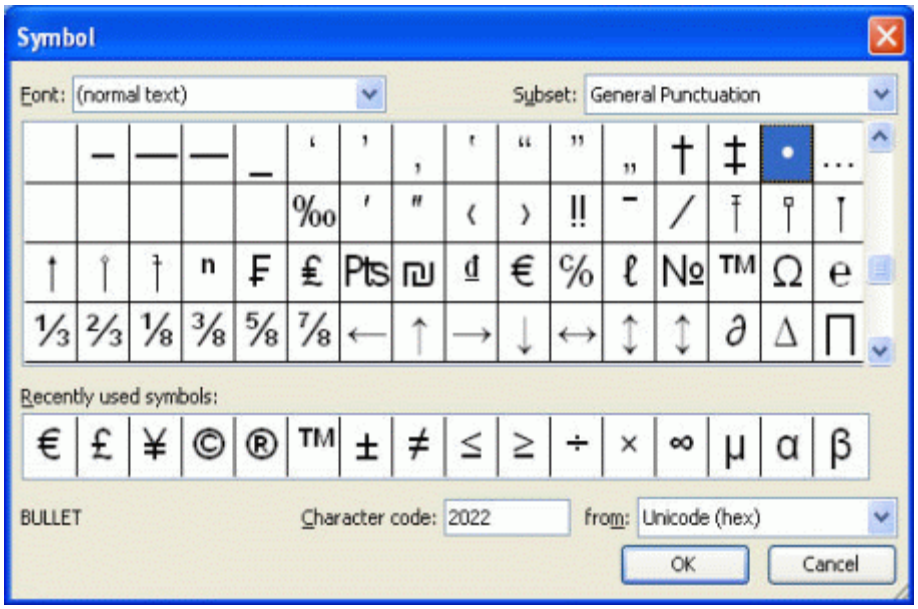
- From the **Format** menu, click **Bullets and Numbering**.



- Click on the bullet style you want.
- Click **OK**.

To create Custom Bullets

- From the **Format** menu, click **Bullets and Numbering**.
- From the **Bullets and Numbering** dialog box, click on the **Customize**button to display the **Symbol** dialog box.



- Select a customized bullet and click **OK**.

To add or remove numbering

- Highlight the paragraph/s you want to add or remove numbering from.
- Click the **Numbering** icon on the **Formatting** toolbar.

To change numbering style

- From the **Format** menu, click **Bullets and Numbering**.
- Click on the **Numbered** tab. Click on the numbering style you want.
- Click **OK**.

To change Bullets or Numbering Color

- From the **Format** menu, click **Bullets and Numbering**.
- Click the down arrow next to the **Color** drop-down menu box.
- Select the color you wish to apply to your bullets or numbering.
- Click **OK**.

The PowerPoint Drawing Toolbar

The PowerPoint **drawing toolbar** provides many commands for creating and editing graphics. The toolbar normally located at the bottom of the PowerPoint screen.

To display the drawing toolbar

- From the **View** menu, point to **Toolbars** and click on **Drawing**.

Here are the PowerPoint **Drawing** toolbar icons and its function:

Draw	Enables you to apply different adjustments to the objects that you draw.
Select Objects	Enables you to select a particular drawing object. For selecting multiple objects, keep the Shift key depressed.
AutoShapes	Click on the **AutoShapes** icon to bring up a list of shape menus. Drag the mouse on to a selected set of shapes and select one from the list.
Line	Used to draw a line. To draw perfectly horizontal or vertical line, depress the Shift key while dragging.
Arrow	Used to draw a line with an arrowhead on it.
Rectangle	Used to draw a rectangle. To draw perfect square, depress the Shift key while dragging.
Oval	Used to draw an oval. To draw perfect circle, depress the Shift key while dragging.
Text Box	Used to draw a text box into which you can enter text.
Vertical Text Box	Used to draw a vertical text box into which you can enter the text vertically.
Insert WordArt	Used to insert different pattern of WordArt to your presentation.
Insert Diagram or Organization Chart	Used to insert diagram or organization chart.
Insert Clip Art	Used to insert clip art.
Insert Picture	Used to insert picture from the location that you specify.
Fill Color	Used to fill a drawing object with a color or shading.

Line Color	Used to define the line color of a drawing object.
Font Color	Used to formats the selected text with the color you pick.
Line Style	Used to define the line style used by an object.
Dash Style	Used to define the dashed line style used by an object.
Arrow Style	Used to define the arrow line style.
Shadow Style	Click the shadow style you want for the selected object.
3-D Style	Click the 3D style you want for the selected object.

To add an AutoShape

- Click on the **AutoShapes** icon on the PowerPoint **Drawing** toolbar to display the **AutoShapes** menu.
- Click on the **AutoShape** you required to select it.
- Position the mouse pointer at the location where you want the**AutoShape** to begin.
- Hold down the left mouse button and drag to position the **AutoShape**on the slide.
- Release the mouse button when the size and proportion you require.
- To further adjust the shape, select the shape and drag the adjustment handle.

To draw a line

- Click the **Line** icon from the PowerPoint **Drawing** toolbar. The mouse pointer changes into a cross-hair pointer when moved over the slide.
- Click at the location where you want the line to begin and drag. Release the mouse button when you want the line to end.

To draw an arrow head

- Click the **Arrow** icon from the PowerPoint **Drawing** toolbar. The mouse pointer changes into a cross-hair pointer when moved over the slide.

 Click at the location where you want the line to begin and drag. Release the mouse button when you want the arrow to end.

To draw a rectangles

 Click the **Rectangle** icon from the PowerPoint **Drawing** toolbar. The mouse pointer changes into a cross-hair pointer when moved over the slide.

 Click at the location where you want the rectangles or ovals to begin and drag to draw the object. When you have finished, release the mouse button.

To draw an ovals

 Click the **Oval** icon from the PowerPoint **Drawing** toolbar. The mouse pointer changes into a cross-hair pointer when moved over the slide.

 Click at the location where you want the rectangles or ovals to begin and drag to draw the object. When you have finished, release the mouse button.

To create a text box

 Click on the **Text Box** icon on the PowerPoint **Drawing** toolbar.

 Position the cross-hair pointer using the mouse and depress the left mouse button. Drag the mouse until the size you require, then release the mouse button.

 The text box will appear in the document, and you can now type in text or import a graphic into the text box.

To create a vertical text box

 Click on the **Vertical Text Box** icon on the PowerPoint **Drawing**toolbar.

 Position the cross-hair pointer using the mouse and depress the left mouse button. Drag the mouse until the size you require, then release the mouse button.

 The text box will appear in the document, and you can now type in text or import a graphic into the text box.

To create a WordArt object

 Click on the **Insert WordArt** icon on the PowerPoint **Drawing** toolbar.

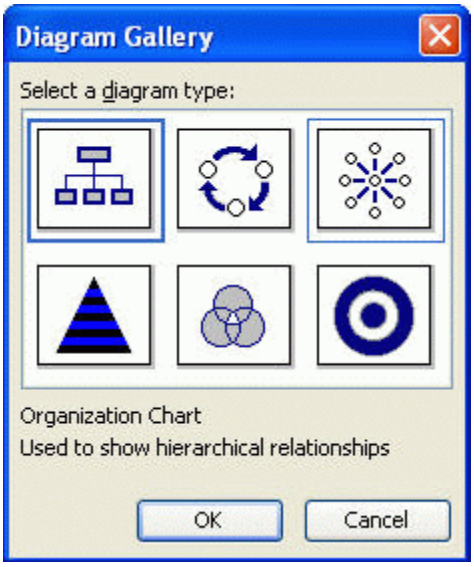
- From the **WordArt Gallery** select a style to use and click on the **OK**button.

- From the **Edit WordArt Text** dialog box displayed, enter the required text in the 'Your Text Here' area.

- Click on the **OK** button to insert the **WordArt**. You can move the**WordArt** to the intended place in the slide.

To create a Diagram or Organization Chart

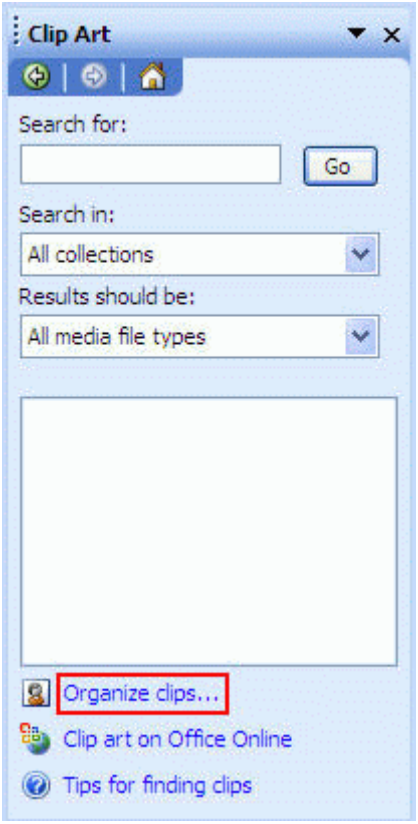
- Click on the **Insert Diagram or Organization Chart** icon on the PowerPoint **Drawing** toolbar.



- From the **Diagram Gallery** select a diagram type and click on the **OK**button.

To insert a clipart

- Click on the **Insert Clip Art** icon on the PowerPoint **Drawing** toolbar to open the **Clip Art** side pane.



 The **Search for:** field allows you to enter one or more words pertaining to a specific graphic you wish to search for. Once enter, click on **Go**button to begin search. Note: Most of the time, this required Internet connection. If you do not have, then…

 Click on the **Organize clips…** (blue color wordings)

 From the **Microsoft Clip Organizer** window, double-click on the **Office Collections**.

 As you can see, there are sub-categories such as academic, agriculture, etc. Each category has few clip arts on it.

 Click on the down arrow at the right hand side of the picture and select**Copy**.

 Position your mouse cursor at the location where you wish to place theclip art. Click the **Paste** icon on the **Formatting** toolbar.

To insert a picture

 Click on the **Insert Clip Art** icon on the PowerPoint **Drawing** toolbar to open the **Insert Picture** dialog box.

 Select the picture you wish to insert and click on **Insert** button.

PowerPoint Design Template

You can create a PowerPoint design template of your own.
Starting from a blank design, you can add elements such as a slide background, color scheme, font size and style, placeholder size and position, etc. Then, save the file as PowerPoint template.

To create your own design template

 On the **Standard** toolbar, click **New** icon.

 From the **View** menu, point to **Master** and click on **Slide Master**. This will switch your slide to Master view.

 Below are some of the changes that you can make to the slide master:

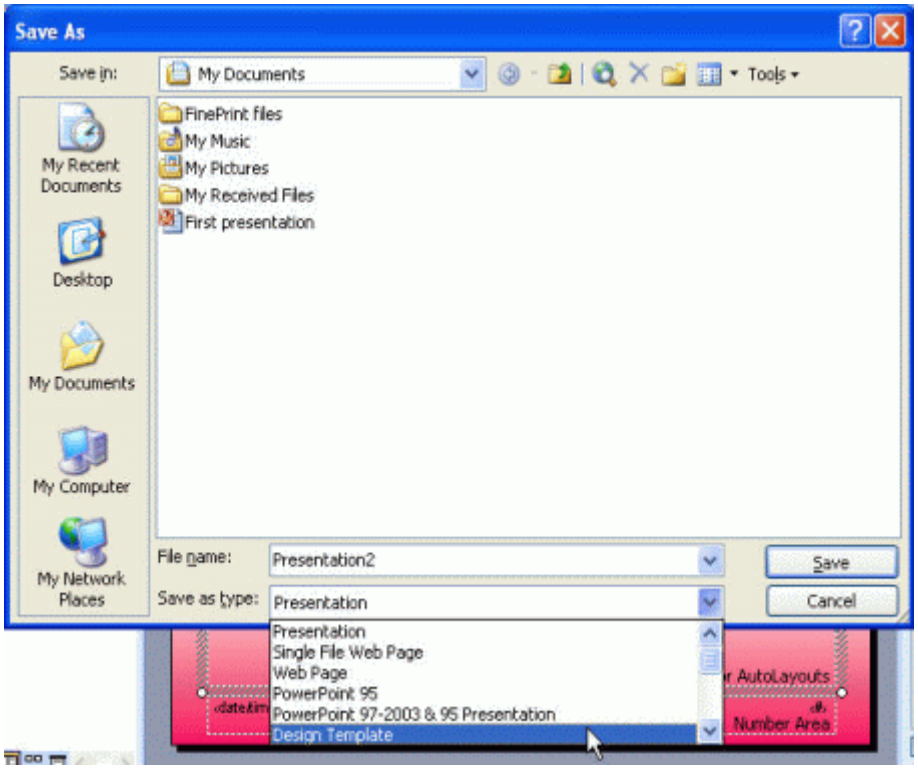
1. To change the fonts formatting, click the text or the placeholder containing the text On the **Format** menu, click **Font**, and then make your selections in the **Font** dialog box. Click **OK** when finish.

2. To change the background, on the **Format** menu, click**Background**, make selections in the dialog box, and then click**Apply**.

3. To insert a picture, text box, a shape, etc, use the buttons on the**Drawing** toolbar.

4. To move a placeholder, click it to select it, and then point to the placeholder border. When the pointer becomes a four-headed arrow, drag the placeholder to a new location. You also can resize the placeholders.

 Once finish, on the **File** menu, click **Save As**.



 From the **Save As** dialog box, in the **File name:** box, type a name for your template, and then, in the **Save as type:** box, click the drop down menu and select **Design Template**.

 Click **Save**.

Note: The template is automatically saved to the Templates folder. After you exit and restart PowerPoint, the template is available in the **Slide Design** task pane, in alphabetical order by file name, under **AvailableFor Use**.

PowerPoint Slide Design

The PowerPoint **Slide Design Pane** offers three easy ways to make your presentation look professional, colorful, and interesting: Design Templates, Color Schemes, and Animation Schemes.

To Display the Slide Design Pane

 Click the **Slide Design** icon on the **Formatting** toolbar

OR From the **Format** menu, click **Slide Design**.

1) PowerPoint Slide Design - Design Templates

Design Templates offer a quick and easy way to provide an attractive and interesting background to your presentation. For more informationabout the design templates, **click here.**

2) PowerPoint Slide Design - Color Schemes

Color Schemes quickly add to or change the colors of your slides including the background, title text, body text, fills, shadows, and hyperlinks.

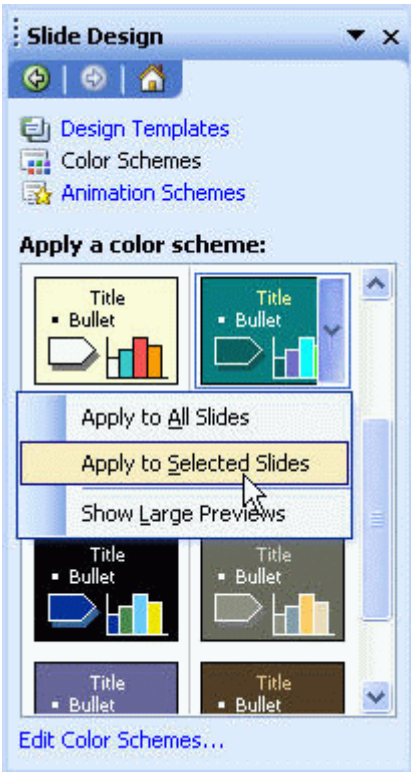
A default color scheme is applied to your slides when you select a Design Template. Each Design Template includes additional Color Schemes you can use.

To apply a Color Scheme to One Slide

Open the PowerPoint slide where you want to apply the Color Scheme.

 Click the down arrow next to the Color Scheme you want.

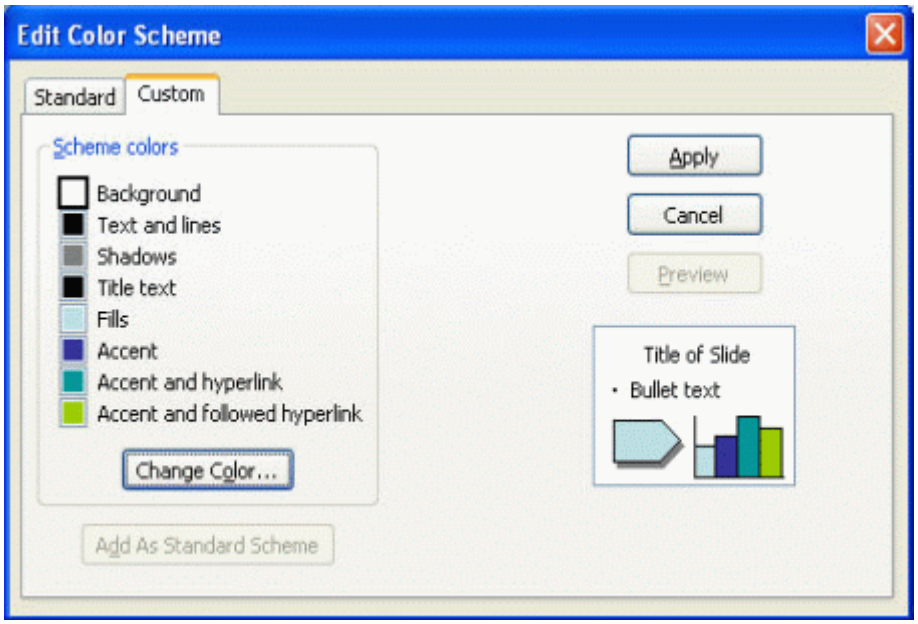
 Click **Apply to Selected Slides**.



Note: If you wish to apply the color scheme to all slides, click **Apply to All Slides**.

To customize Color Schemes

- At the bottom of the **Slide Design – Color Schemes** Task Pane, click**Edit Color Schemes…**
- This will open the **Edit Color Scheme** dialog box.



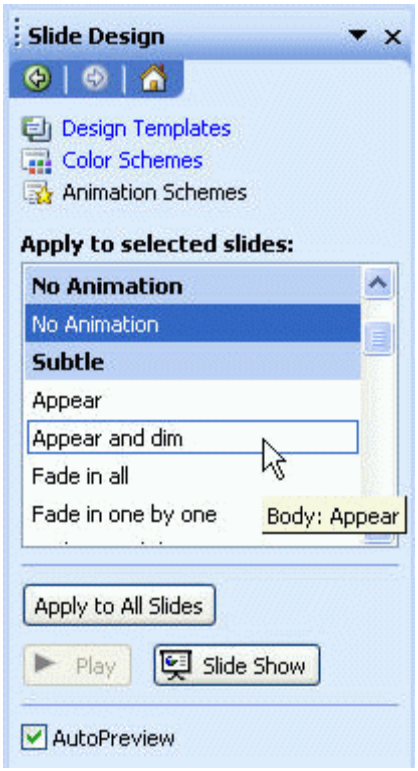
- Click on the element you want to customize (e.g. Background, Title text, etc) and click **Change Color…** button.
- Select a color and click **OK**.
- When you have completed customizing your colors, click **Apply** button.

3) PowerPoint Slide Design - Animation Schemes

Preset Animation Schemes make it easy to animate your slide show. Animations are divided into subtle, moderate, and exciting schemes, and generally apply animations to titles, bulleted lists, and paragraphs.

To apply an Animation Scheme to One Slide

- Open the PowerPoint slide where you want to apply the Animation scheme.
- Open the Slide Design – Animation Schemes Task Pane, and select the animation you want.



- The animation will automatically be applied to the current slide.

To apply an Animation Scheme to All Slides

- Select the animation you want.

 Click on the **Apply to All Slides** button at the bottom of the Slide Design – Animation Schemes Task Pane.

PowerPoint Slide Show

Once you finish created the presentation slides, what is next?
PowerPoint SlideShow.

Yes, PowerPoint slide show is the slide thatrunning in 'full screen' mode. That is the actual show screen that your audiences will see, so run it with just a click or press of a button.

To view a Slide Show from the first Slide

 From the **View** menu, click **Slide Show**.

To view a Slide Show from the current Slide

 Click the **Slide Show** icon at the bottom left of the PowerPoint screen.

To move to the next slide in a Slide Show

 Press the **Enter** key.

To move to the previous slide in a Slide Show

 Press the **Backspace** key.

To move to a specific slide in the Slide Show

 Right-click on the current slide (in the slide show) and select **Go to Slide**.

 Select the slide you want.

To Pause the Slide Show

 Right-click on the current slide (in the slide show) and select **Pause**.

To Turn the Screen Black

 Right-click on the current slide (in the slide show).

 Point to **Screen** and click on **Black Screen**.

To Turn the Screen White

- Right-click on the current slide (in the slide show).
- Point to **Screen** and click on **White Screen**.

Pointer Options

The Automatic Pointer is the default pointer in a PowerPoint slide show. When set to automatic, the pointer disappears after fifteen minutes of inactivity.

To use the arrow pointer

- The Arrow pointer is always visible during a presentation.

To select the arrow pointer

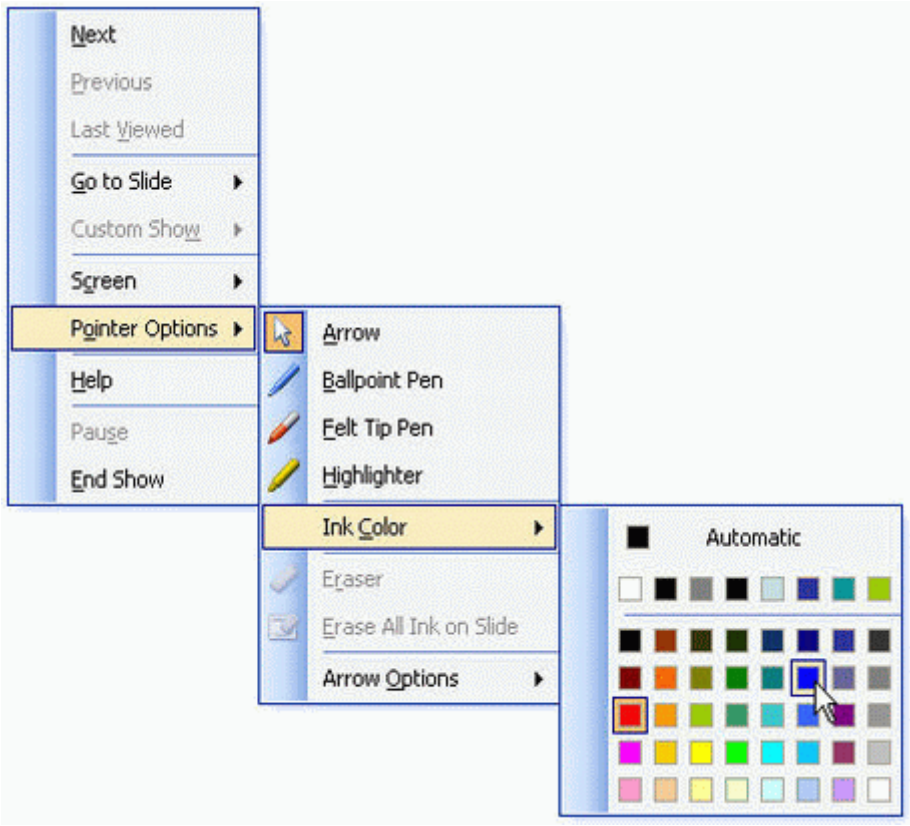
- Right-click on the current slide (in the slide show).
- Point to **Pointer Options** and click on **Arrow**.

To change the pointer to a pen

- By changing the pointer to a pen, you can write on your slides during the slide show.
- Right-click on the current slide (in the slide show).
- Point to **Pointer Options** and click on **Pen**.

To change pen color

- Right-click on the current slide (in the slide show).
- Point to **Pointer Options** and **Ink Color**.
- Select the color that you want.



PowerPoint Presentation Printing

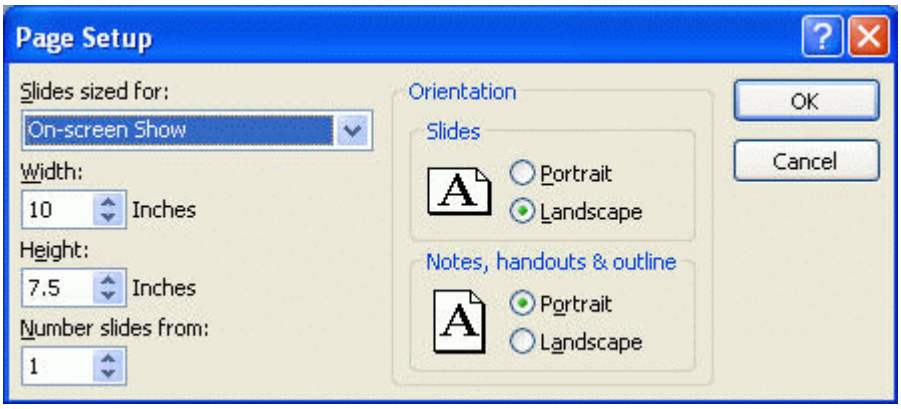
Is the presentation printing easy? Seethe guides below to find your answer.

In order to print,MicrosoftPowerPointrequires that a **printer driver** has been installed in your computer that matches the printer you are currently using.
ON the printer and load some papers to the printer tray.

To change Page Setup options

- From the **File** menu, click **Page Setup**.

- From the **Page Setup** dialog box displayed, click on the down arrow on the **Slides sized for:** box and choose one of the following options:



On-screen Show	Page orientation is set to landscape. Width is set to 10 inches, height to 7.5 inches.
Letter Paper (8.5 X 11 in)	The width is set to 10 inches, height to 7.5 inches. To allow your slides to fill the page, the orientation is set to landscape.
Ledger Paper (11 X 17 in)	The width is set to 13.32 inches, height to 9.99 inches. Page orientation is set to landscape.
A3 Paper (297 X 420 mm)	The width is set to 14 inches, height to 10.5 inches. Page orientation is set to landscape.
A4 Paper (210 X 297 mm)	If the orientation is set to landscape, the width is set to 26 cm, height to 18 cm so that the slide fill the A4 page.
B4 (ISO) Paper (250 X 353 mm)	The width is set to 11.84 inches, height to 8.88 inches.
B5 (ISO) Paper (176 X 250 mm)	The width is set to 7.84 inches, height to 5.88 inches.
35 mm Slides	The width is set to 11.25 inches, height to 7.5 inches. If the orientation is landscape, the slide content will fill the slide area.
Overhead	The width is set to 10 inches, height to 7.5 inches. To allow your slides to fill the page, set the orientation to landscape.
Banner	The width is set to 8 inches, height to 1 inch.
Custom	Select the dimensions you require by clicking on the up and down arrow

	in the **Height** and **Width** boxes.

 If you want to begin numbering your slides with any number other than one, enter a new number in the **Number slides from:** box.

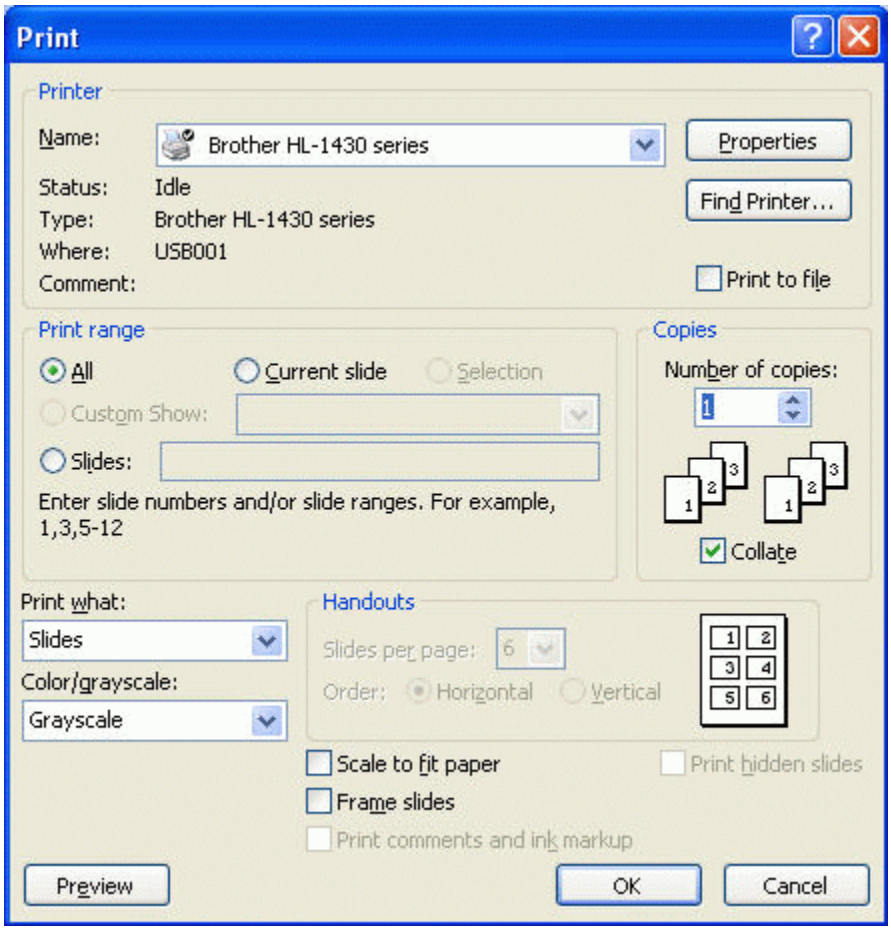
 In the **Orientation** section, select the orientation for your slides in the**Slides** box. Choose either Portrait or Landscape.

 In the **Notes, handouts & outline** section, select the orientation for your notes, handouts and outline. Choose either Portrait or Landscape.

 When finish, click **OK**.

To print

 From the **File** menu, click **Print**.



- The **Print** dialog box has 4 sections: Printer, Print range, Copies and Print what.

Printer section

- This section displays information regarding the currently selected printer. Make sure that in the **Name:** box display the printer name that you are going to print to.

Properties Button

Click on this button will let you set the printing paper size, paper orientation, color or black/white printing, etc. This is very important, as it will affect the printing output.
Click **OK** when finish and return to the**Print** dialog box.

Print range section

This section allows you to define what to print. The options available are:

- **All –** the whole presentation.

- **Current Slide –** the currently selected slide.

- **Selection –** a subset of the presentation selected by the mouse.

- **Slides –** a selection of continuous and/or non-continuous slides by entering the slide numbers.

Copies section

This region allows you to enter the number of copies required and whether you want them collated or not.

Print what section

It contains the following options:
Print what:

- Slides – The PowerPoint normal slides.

- Handouts (2,3 or 6) – Allows you to print 2, 3 or 6 slides in a page (normally to be distributed to the audiences)

- Notes Pages – the notes page of your slides.

- Outlines View - The outline view of your presentation slides.

Color/grayscale:

- Color - This will print using the color settings as in the slides.

- Grayscale - This will print using grayscale color adjustment.

- Pure blank & white - This will print purely black and white color.

Scale to fit paper - Tick the option will fit the paper size printing.
Frame slides - Tick the option will print the slide frame as well.

When everything finish, click the **OK** button to start printing.
Effective PowerPoint Presentation, What to Prepare?

Here are some guides when you do PowerPoint presentation that you need to pay attention to:

Physical Environment Planning

1) **Room size** - in relation to the anticipated number of attendees. Avoid over-crowding, or too large a room for a small audience.

2) **Light sources** - Brightest light on the presenter where possible, medium light over the audience, and less light around the screen, or between the screen and the projector, if possible.

3) **Electrical socket outlets –** the availability for setting up equipments and make sure it is functioning.

4) **Electrical extension cables –** approximately 18 feet/6 meters long or at least can connect from socket outlets to the equipments.

5) **Projector and screen** - for the viewing by a larger audience.

6) **Projector and computer** - Consider simultaneous display. Having a laptop at the podium so the presenter can see exactly what the audience is seeing on screen without having to turn his/her head, and at the same time, retain eye contact with the audience.

7) **Microphone, speakers and amplifier** - for the presenter in a large venue. Test the functionality and ensure the person in-charge is qualified to control the amplifier.

8) **Cordless Presenter –** enables the presenter to activate slides, indicate key points in the slide from a distance.

PowerPoint Presentation – A quick guides

(1) Begin the slide show by pressing the **F5** key.

(2) Move to the next slide by pressing the **ENTER** or by clicking the left mouse button.

(3) Go back to the previous slide by pressing **BACKSPACE**, or the left arrow key.

(4) To end the slideshow before it is complete press **ESC** key on the keyboard.

(5) A pen tool is available for drawing on the screen with the mouse. Press **CTRL+P** and the pointer will change to a pen that allows you to draw freehand on the screen using the mouse. Press the **E** key to erase all pen strokes. Press **CTRL+A** to disable the pen feature and revert the pen back to a pointer arrow.

(6) If you would like to use the pen to draw on a blank screen during a presentation, press the **B** or **W** keys to turn the screen to black/white. Press **B** or **W** again to return to the presentation when you are finished drawing.

(7) To hide the pointer and button from the screen press the **A** key.

(8) Be sure to preview the slide show using a projector if one will be used during the presentation. Words or graphics that are close to the edge of the screen may be cut off by the projector.

Delivering PowerPoint Presentation with Credibility

1. **Set up your "Authority".**

Early on, explain why you have the right to talk to them on the topic by highlighting relevant elements of your background:

- If it's a technical topic and you were trained as an engineer, say so.
- If you've been working in the field for the last 2 years, say so.
- If you've studied the subject in depth and interviewed experts, say so.
- If you don't have direct but do have parallel experience, say something like: "when I was working in (this other field), I had considerable experience in (the topic) that I believe applies here..."

2. **Demonstrate Understanding.**

Prove that you know what you're talking about by:

- Quickly recapping the preparation you've done for the session.

 Using the audience's language. Learn and use the terms your audience knows to facilitate understanding and demonstrate that you took time to prepare. Be careful with acronyms and jargon.

 Acknowledge that there may be people in the room that know more than you do about some aspects of the matter at hand, but that your study gives you a good grasp of what needs to be done.

3. **Establish Facts.**
Identify the source of the information you are using such as:

 "the sales report for the month just ended shows..."

 "the data from the field test conducted in XXX last month indicates..."

 "the recent research survey of XXX customers in the Southwest concludes..."

 clearly identify the origin of data used in charts and graphs.

4. **Tell the truth.**
Your audience will never really trust you if they catch you in a lie. Avoid the temptation to pretend to know the answer to a question and fake it. It's better say "I don't know" and find the answer from the group or commit to research the issue after the session.

5. **Be yourself.**
Trying to be someone you're not is almost as bad as telling a lie. It's also a lot more work. You can, however, take up a temporary role to illustrate your understanding of the views of others by using introductory phrases such as:

 "If I was the parent of a teenage girl, I might be thinking...."

 If we were walking in the shoes of the customer, we might..."

6. **Doing what you say you will do.**

 If you say you're starting at 9:00 a.m. then start at 9:00 a.m.

 If you promise frequent breaks, allow for frequent breaks.

 If you say you're going to take all questions, do so.

7. **Speak with conviction and enthusiasm.**
Say it like you mean it, and your audience will believe in your words. If you sound tentative, people will book you as "squishy" and question your commitment on the matter. Eye contact is

extremely important.

Establishing solid credibility improves your chances of success in several ways:

- It works to solve two key tensions (Audience vs. Presenter and Audience vs. Material)
- It allows the group to listen to what you have to say without having to spend time wondering who you are or where you got your information
- It sets a "trust" level that will allow people to seriously consider and then act on your recommendations
- It builds your reputation for future presentations!

How PowerPoint Help Feature Can Solve Your PowerPoint Problem?

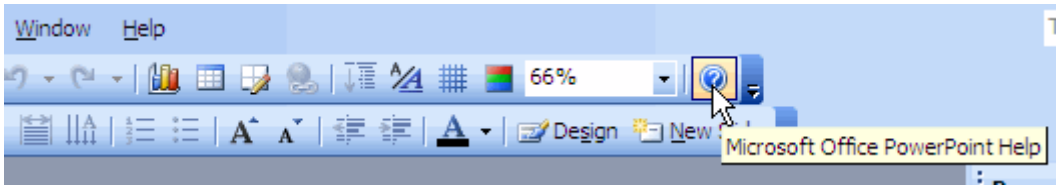
Having trouble when using PowerPoint? Use the PowerPoint Help feature to solve your problem!

Below are the step-by-step guides that you can use to solve almost all your PowerPoint related difficulty. Thanks to this PowerPoint useful feature.

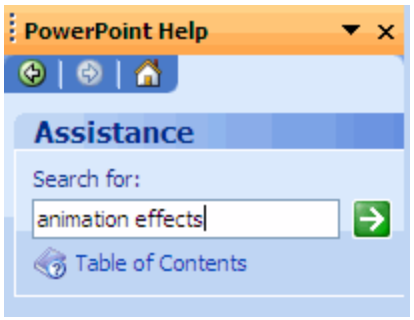
Note: It's recommended that you connect to the Internet to use the PowerPoint Help feature.

To start the Microsoft PowerPoint Help

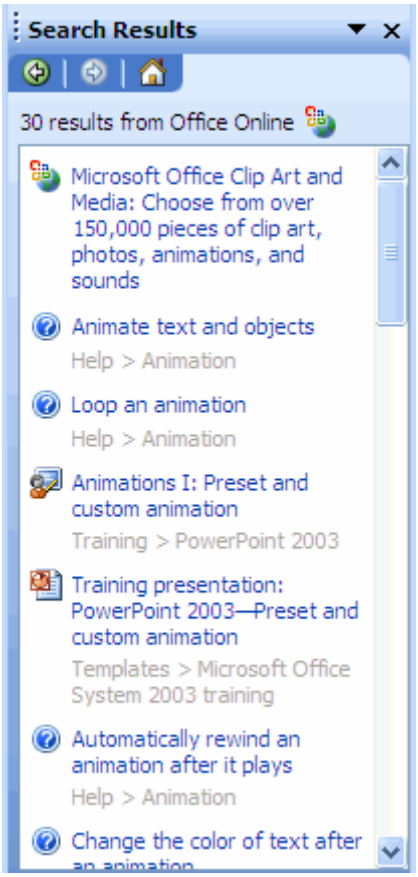
- Click on the **Microsoft Office PowerPoint Help** icon located on the**Standard** toolbar.



- Then you will see the **PowerPoint Help** task pane display at the right hand side of your PowerPoint screen.
- Type in the relevant text that you would like to get help in the **Search for:**text box.

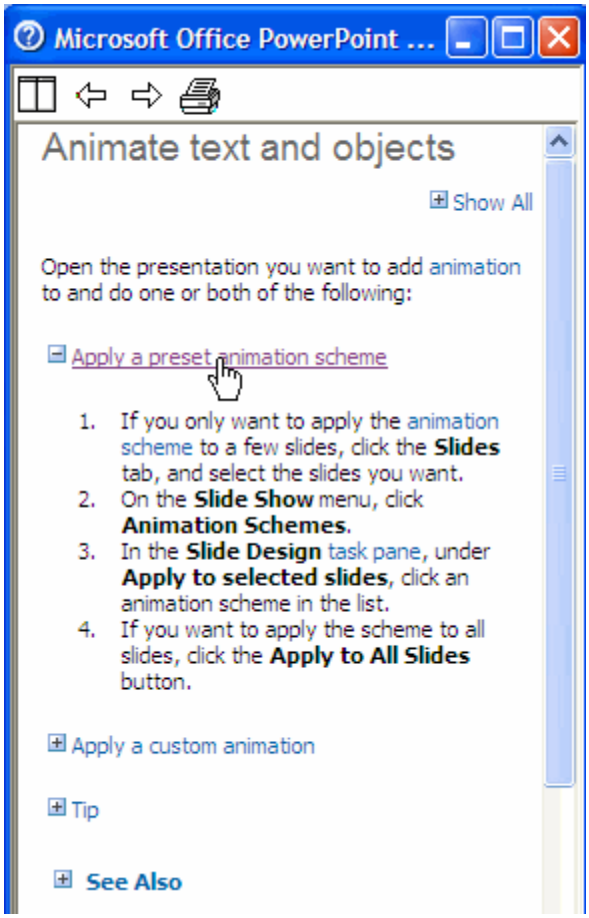


For example, we type in 'animation' and press **Enter.** Then, the search results are displayed, with 30 results as shown here.



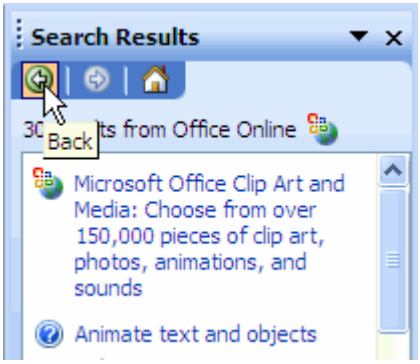
Click on the particular topic, let say we would like to learn how to put text animation in PowerPoint, then click on the Animate text and objects.

This will bring you to another window that guides you to do the text animation.



 You can click on the blue color link to get more information. When finish, click on the Close button. This will bring you back to the **Search Results**pane.

 To go back search for other topic, just click on the **Back** button from the**Search Results** pane. You also can use the **Forward** button.



PowerPoint Slide Master - What you can do with it?

What is PowerPoint Slide Master?

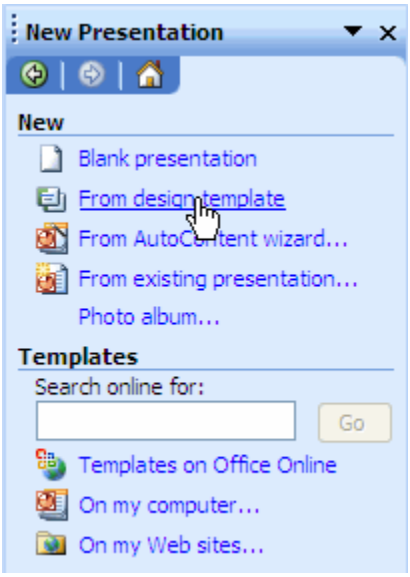
Slide Masters are basically templates that

are used to create a new presentation. You can use the existing PowerPoint templates or create new ones.

The PowerPoint slide master contains text placeholders and placeholders forfooters, such as the date, time, and slide number. When you want to make a global change to the look of your slides, you don't have to change each slide individually. Just make the change once on the slide master, and PowerPoint automatically updates the existing slides and applies the changes to any new slides you add.

To create a new presentation template file (Slide Master)

 From the **File** menu, click **New**. This will display the **New Presentation** pane on the right hand side of the screen.



 Click on the **From design template** link. This will displayed a list of design templates.

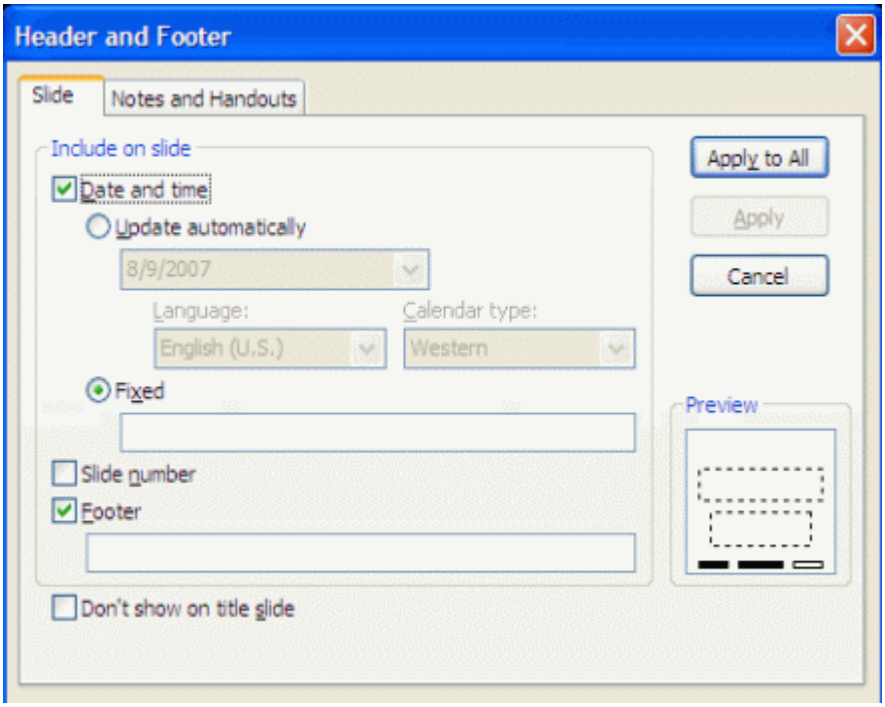
 Select any one of the template to create your own presentation template. For example, choose the Firework.pot template.

 From the **View** menu, point to **Master** and click on **Slide Master**. The following slide will be displayed.

- You are now working on the underlying slide master for the presentation. You can use the drag and drop method to move items around the page.
- You can add new items such as Clip Art, graphics, company logo, etc to the slide.
- When you have finished your customization, click on the **File** menu and choose **Save As** command.
- In the **File name:** box, enter a name for the new template.
- In the **Save as type:** box, click on the drop down menu and select**Design Template (*.pot)** .
- Click on the **Save** button and close the file.
- To create a presentation based on the new template, click on the **File**menu and select **New** command. Your new template will normally be displayed in the **Recently Used** section of the **Slide Design** pane.

To insert the slide header and footer

- From the **View** menu, point to **Master** and click on **Slide Master**.
- From the **View** menu again, click **Header and Footer** to display the header and footer dialog box.



- To insert the date and time, tick on the **Date and time** check box. You can decide that this is entered as a fixed date or one that updates each time you print the presentation.

- To insert the slide number, tick on the **Slide number** check box.

- To insert the footer, tick the **Footer** option and enter the required text.

- To disable the display of information on the title page, tick the **Don't show on title slide** check box.

- Click on the **Apply to All** button.

To make a slide different from the slide master

- Display the slide you want to change on the screen. Make changes to the font, color, background, etc as required.

- Any changes made to an individual slide will not be reflected on any other slides, or **Master Slide**.

To reapply the slide master formats to the slide

- Display the slide where you want to reapply the PowerPoint **Slide Master** formatting.

- From the **Format** menu, click **Slide Layout**.

- Click **Reapply**. The text and placeholders on the slide revert to the**Slide Master** format.

Presentation Planning
– The Essential 10 Steps

PowerPoint **presentation planning** is the important preparation steps before you go to the stage. Follow the 10-step guides here can lead you to deliver the presentation just like the pros.

Step 1: Identifying Audience and Purpose

To start your presentation planning, think of your audience and ask yourself these questions:

- How many people will be attending the presentation? And the average age?
- Does the audience care or already know the topic?
- Are the audiences in a hurry?

Step 2: Choosing Presentation Method

- Speaker-led presentations – the speaker is the main attraction, the slide and handout are the add-on
- Self-running presentations – the slides carry the entire burden as there is no live speaker and handouts
- User-interactive presentations – the audience chooses when to advance slides and what to see next.

Step 3: Choosing Delivery Method

- Computer show through PowerPoint (recommended)
- Computer show through a website
- Computer show on CD
- Overhead transparencies
- Paper/handout

Step 4: Choosing Appropriate Template and Design

PowerPoint includes 2 kinds of templates: Design templates and AutoContent Wizard. Some suggestions here:

- Blues and greens backgrounds make audience feel good and relaxed
- Reds and yellows make audience happy and excited
- Slides projected on screen, use high contrast color
- Print/handout, dark on white is better.

It's best if all slides use the same design and color scheme. Use the appropriate fonts color and size.

Step 5: Developing the Content

Type the text to the PowerPoint slides. Your content may include charts, graphics, linking, video, and other necessary elements.
You also can enhance your slide elements with visual image. This can be achieve by changing the font size, reposition the slide element (e.g. logo), etc.

Step 6: Adding Multimedia Effects

The multimedia effects are important for developing the audience interest:
- Adding flashy or short video and soundtracks whenever appropriate
- Slide transitions – how to proceeds/moving from slide to slide
- Animation effect – simple movement of the objects on a slide

Step 7: Creating Handouts and Notes

This step is only applicable only for speaker-led presentations. It can be printed either in black and white or color. You can print from one to nine slides per page.

Step 8: Rehearsing Presentation

The goals for rehearsing are different for each type of presentation:
- Speaker-led presentations: Check the presentation slides to ensure they are complete, accurate and in the correct order.
- Self-running presentations: Ensure the content is correct, audience able to read the text on each slide (even the slow reader can catch it) and the voice matches the slide description.
- User-interactive presentations: Ensure the link accuracy. Each button link or hyperlink to the web site is working fine.

Also, the main purpose here is you can completely deliver your presentation within the given time frame.

Step 9: Giving Presentation

Enough preparation is the key to deliver your presentation with full confidence. Speak as loud as needed with proper eyes-contact and body language.

Step 10: Refining Your Work

Immediately after the presentation, jot down your responses to these questions:

- Could the audience read the slides easily?
- Did the audience look mostly on you, at the screen or handouts? Was that what you intended?
- Did the audience take notes while your were speaking?
- Was the length of the presentation appropriate? Did audience get bored?
- Were there any slides that you wish to add to omit?
- Did the slide transitions and animations add the entertainment value or distracting?
- Did the sound and video clips play with adequate quality, appropriate and useful?

Note: This step is very important in the entire of presentation planning process, make sure you fine-tune it, correct the mistakes and you will be on the way towards excellence.

PowerPoint 2003 Package for CD Feature

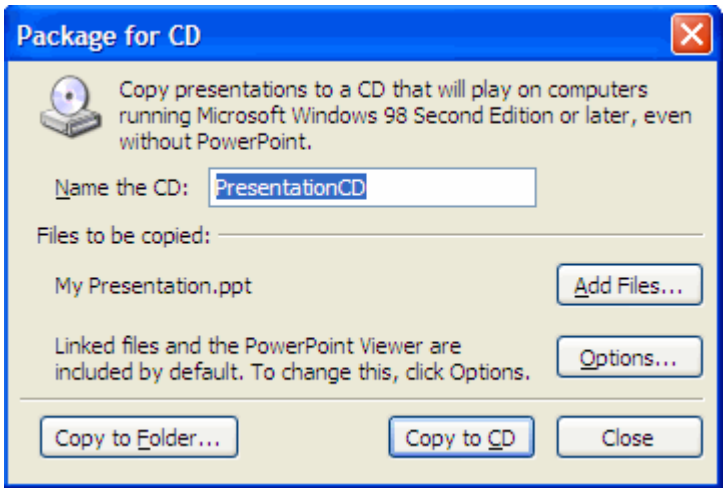
The new PowerPoint**Package for CD**feature is introduced in PowerPoint 2003 which replaces the earlier version of Pack and Go.

It allows users to prepare a presentation for distribution and run on a computer that does not have PowerPoint installed. The feature allows you to write your files to a folder on your computer hard disk or copy to a CD.

To use the PowerPoint Package for CD

- Open the presentation that you want to package. If you are working with a new presentation, it is recommended that you save the presentation first.
- Insert a blank CD/CD-RW disc into the CD drive.

 From the **File** menu, click the **Package for CD**.

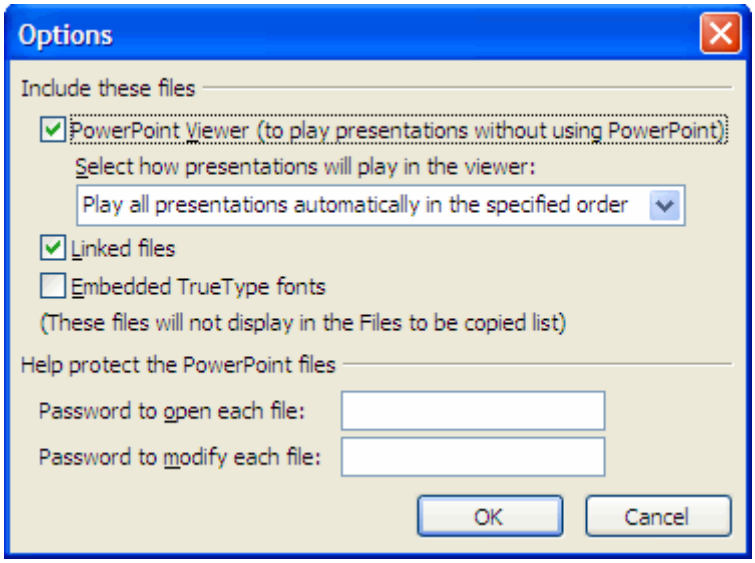


 From the **Package for CD** dialog box displayed, in the **Name the CD:**column, give a name for the CD.

 If you are writing your files to a folder, Package for CD will use the name you enter as the name of the folder your files are written to.

 The **Add Files** button allows you to add more presentations or other files to your archive. You need to browse the files you would like to include and click the **Add** button.

 Click the **Options** button will display the dialog box.



PowerPoint Viewer: Select it will allow you to run PowerPoint presentation on computers that do not have the PowerPoint installed.

Select how presentations will play in the viewer: To prevent presentations from playing automatically, or to specify a different automatic play option.
Embedded TrueType fonts: Select it to include TrueType fonts.
Help protect the PowerPoint files: To require a password to open or edit all packaged presentations, enter the password that you want to use.

- Click **OK** to close the **Options** dialog box.

- Click **Copy to CD** button. Your files will be written to the CD.

Note: If you are using Windows 2000, you must first write your files to a folder. From the folder, you can copy the Package for CD archive to a CD.

How to Change the PowerPoint AutoRecover Interval?

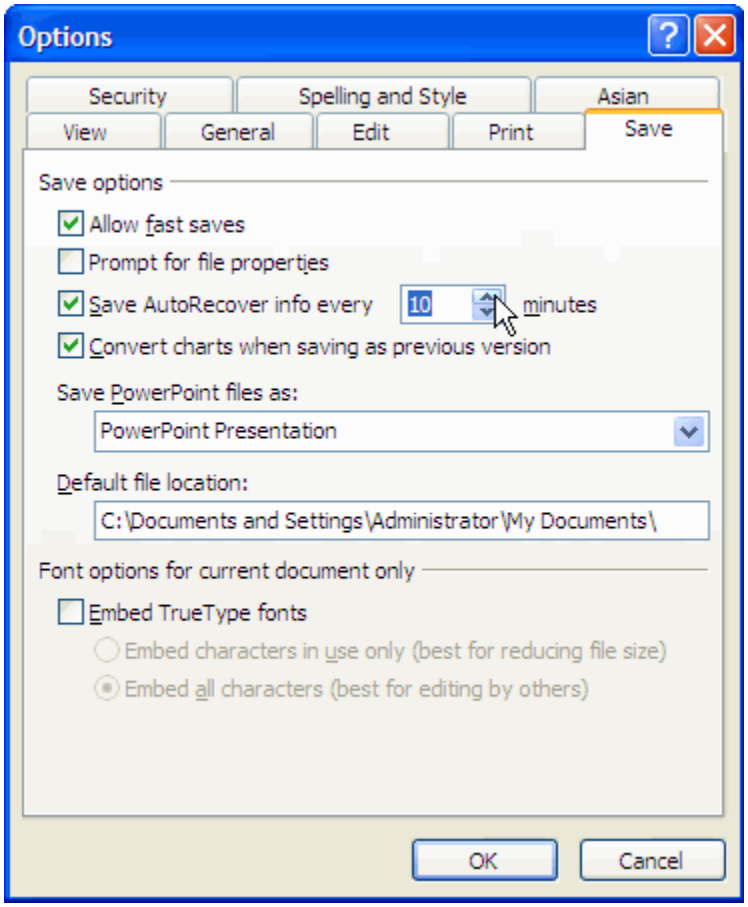
PowerPoint AutoRecover feature can automatically save your presentation/document for you at a specified interval. This lets you recover your document if tragedy strikes. So, if you are working on an important document, you should decrease this interval.

To change the AutoRecover Interval in PowerPoint 2003

- Open the PowerPoint presentation.

- From the **Tools** menu, click **Options**.

- From the **Options** dialog box displayed, click the **Save** tab.



- Ensure that there is a check beside the 'Save AutoRecover info every' option.

- Use the up and down arrows to increase or decrease the interval in minutes or you can directly highlight and type-in a number.

- Click **OK** button. Microsoft PowerPoint will now automatically save your presentation for you at the specified interval.

Note: The above steps can be use in Microsoft Office Word and Excel.

Add Slide from other PowerPoint Presentations

You can insert or add slide that previously-made from one PowerPoint 2003 presentation into another. This can save your time from creating the new slide.

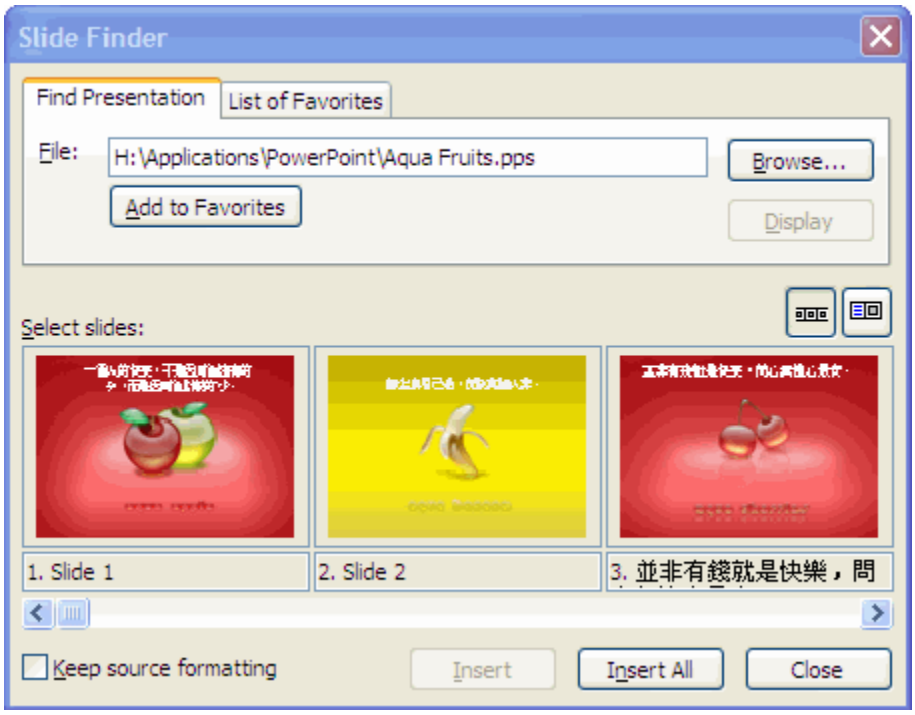
To add/insert slides from other presentations

- Open the presentation that you want to insert slides.

- From the **Insert** menu, click **Slides from Files**.

- From the **Slide Finder** dialog box displayed, click **Browse** button and locate the presentation that has the slide(s) you want to insert.

 The slides displayed in the **Select slides:** section. Drag the slider to see other slides in the presentation.



 Under the **Select slides:** section, choose the slide(s)

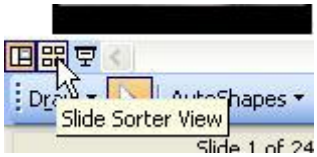
Slide Transitions

Slide Transitions are special effects you can add to a slide show to determine how one slides moves to the next. It's the visual movements as one slide changes to another. The transition effect for a slide refers to how the slide enters, not how it exits. So, when you are creating your presentation slides, do remember to apply the feature otherwise your presentation will be quite boring and not attractive as all the slides movements are same.

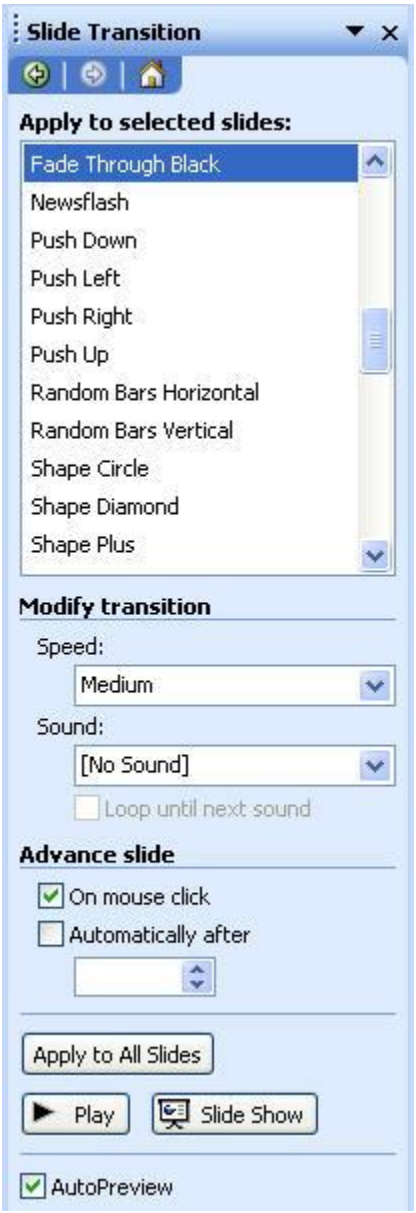
PowerPoint has many different slide transition options to choose from to enhance your slide show. Please note that transitions add a nice little flourish to your presentation, but you don't want them to distract unduly from your message.

To add transitions to a slide show

- Change to **Slide Sorter** view by clicking on the Slide Sorter icon (at the left hand side bottom of the screen).



- From the **Slide Sorter** view, click/select the slide that you wish to apply the slide transition.
- From the **Slide Show** menu, select **Slide Transition** to display the **Slide Transition** pane in the right-hand side of the screen.



- Under the **Apply to selected slides:** section, select the transition you want from the lists.
- Click on the **Play** button to see a preview or to see the real live action, just click the **Slide Show** button.
- Under the **Modify transition - Speed:** section, select how fast you want the transition to take place by selecting *Slow, Medium or Fast* option.
- Under the **Modify transition - Sound:** section, you can choose the sound for the slide transition.
- To apply the transitions of all slides in the presentation, click on **Apply to All Slides.**

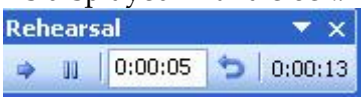
Use Slide Show Timing and Annotations to Control Your Presentation

Setting the **slide show timing** allow you to automate your presentations!

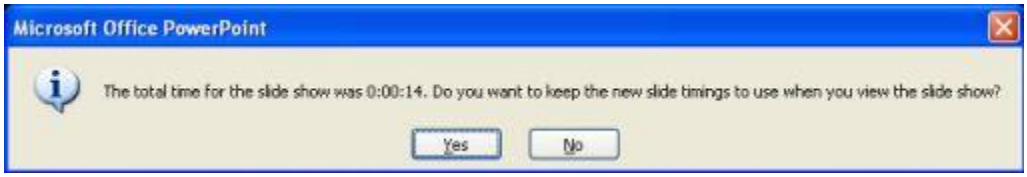
Each slide in your slide show can have a different timing applied to it. For instance, the first slide may appear for 10 seconds, the second for 20 seconds, and the third for 5 seconds. That means you preset the slide timings and let the presentation run automatically.
One drawback for this is that this feature may not suitable for all presenter. For example, if you are required to do lots of explanations during the presentation process, this feature may not suitable as you cannot control the timings.

To set the slide show timing

- From the **Slide Show** menu, click **Rehearse Timings**. From the pop-up show, the top left-hand corner of the screen a button is displayed with a clock.



- The clock shows how long the slide has been on the screen. When you are ready to move to the next screen, click anywhere on the slide, or on the clock button.
- When you reach the end of the presentation a dialog box is displayed telling you the total time taken for the slide show.



- You will be asked if you want to record the new timings and use them in slide show view. Select Yes to record the new timings, or No to cancel them.

To see the timing for each slide

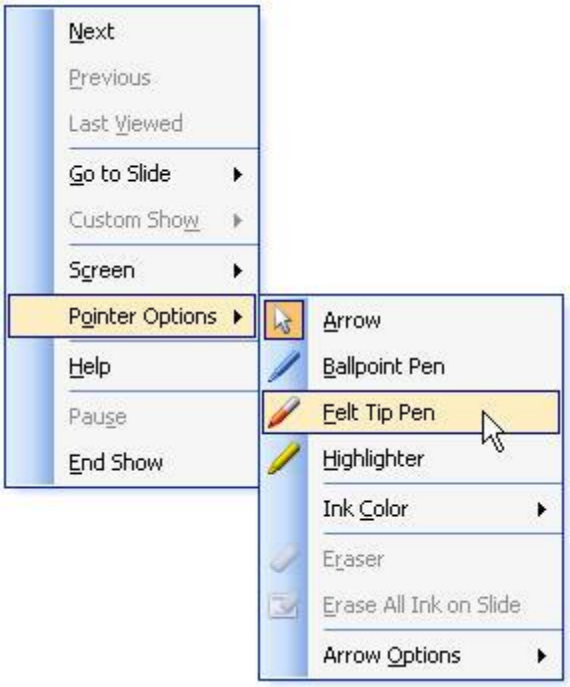
- Switch to **Slide Sorter** view and the timings for each slide will be displayed below the slide.

Slide Show Annotations

The **slide show annotations** feature in PowerPoint allows you to write or draw anything you like freely during the slide show in order to highlight the point or grab the audiences attention.

To add annotations during a slide show

- Begin the slide show by clicking on the **Slide Show** icon or just press **Shift + F5**.
- Right-click anywhere in the slide to display the pop-up menu.
- From the pop-up menu, point to **Pointer Options** and select either **Ballpoint/Felt Tip Pen**or **Highlighter** option from the sub-menu displayed.



- Hold down the left mouse button to write or draw anything on the screen.
- To erase the annotations during a slide show press the **E** key.
- When finished, press the **Esc** key to turn the feature off.

PowerPoint Hidden Slides - How to Hide or Unhide It

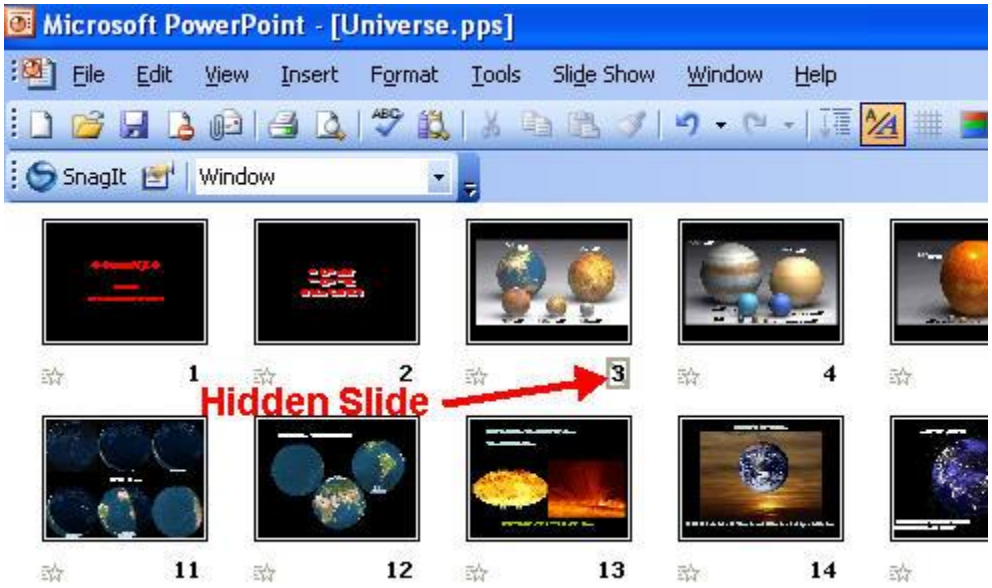
The purpose of **PowerPoint hidden slides** is to bypass certain slides during the slide show.

Put a scenario like this - The presentation slide is created but just don't want to show to the audiences maybe because of the time constrain or slide contain sensitive issue for a particular group of people.

So the solution is you make the slide hidden. How to do it? Follow the tutorial here.

To hide slides in a slide show

- Select the slide(s) you wish to hide.
- From the **Slide Show** menu, click **Hide Slide**.
- If you are working in the Slide Sorter view, you can see an icon appears below the slide, which contain the slide number with a line through it, to indicate that it is hidden.

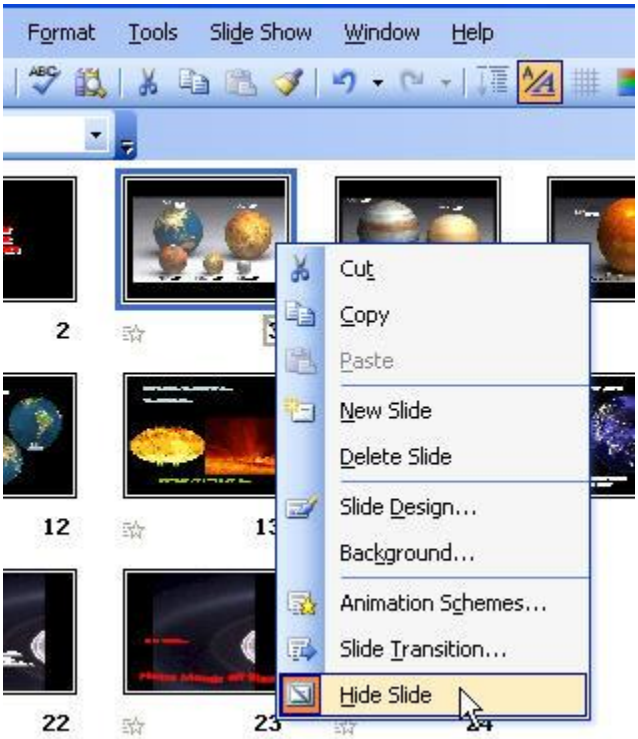


To display a hidden slide during a slide show

- Within the slide show, right click on the slide that precedes the slide that is hidden.
- Click on the **Go to Slide** command, and then click on the slide that are hidden to display it.

To unhide the slide

- If you are working in the **Slide Sorter** view, right-click on the hidden slide and from the pop up menu, select **Hide Slide**.



PowerPoint Custom Animation Effects

PowerPoint custom animation effects are the special visual or sound effect to text or an object. You can control how and when each individual object enters and exits, and you can even make objects dance around and make noise while they are just sitting there on the slide.

For example, you can have your text bullet points fly in from the left, one word at a time, or hear the sound of applause when a picture is uncovered. You can animate any number of objects on a slide, and you can even animate elements of a chart.

This kind of animation effects can dramatically increase the interest of the audiences and make your presentation more alive.

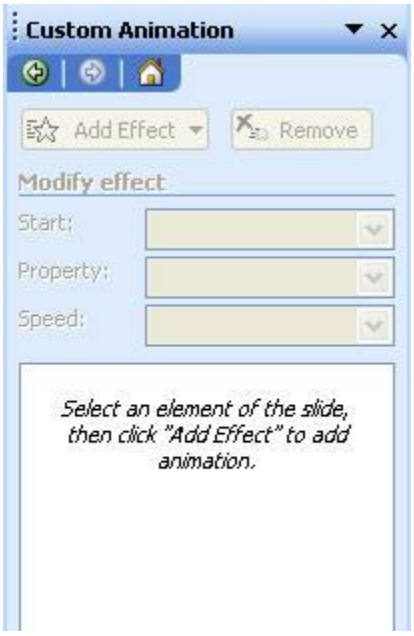
There are four types of animation effects possible on a slide, and each has a different color icon as follows:

- **Entrance (green):** The item appears on the slide separately from the slide itself. Either it does not appear right away, or it appears in some unusual way (like flying in), or both.
- **Emphasis (yellow):** An item that is already on the slide moves or changes in some way. For example, perhaps it spins around, grows, or changes color.
- **Exit (red):** The item disappears from the slide before the slide itself disappears, and (optionally) it does so in some animated way.
- **Motion paths (gray):** The item moves on the slide according to a preset path you specify, like a toy train running on a track you have designed.

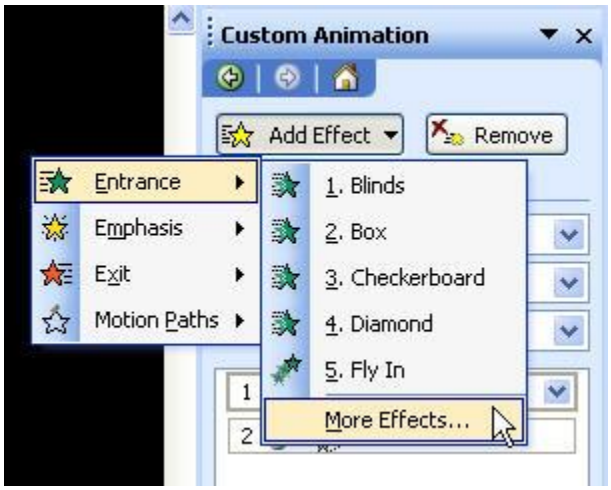
Note: Entrance and exit effects usually involve some type of motion. Emphasis effects can involve motion but not necessarily; there are also emphasis effects for changing color, changing font, growing/shrinking, and so on.

To apply the PowerPoint custom animation effects to the objects

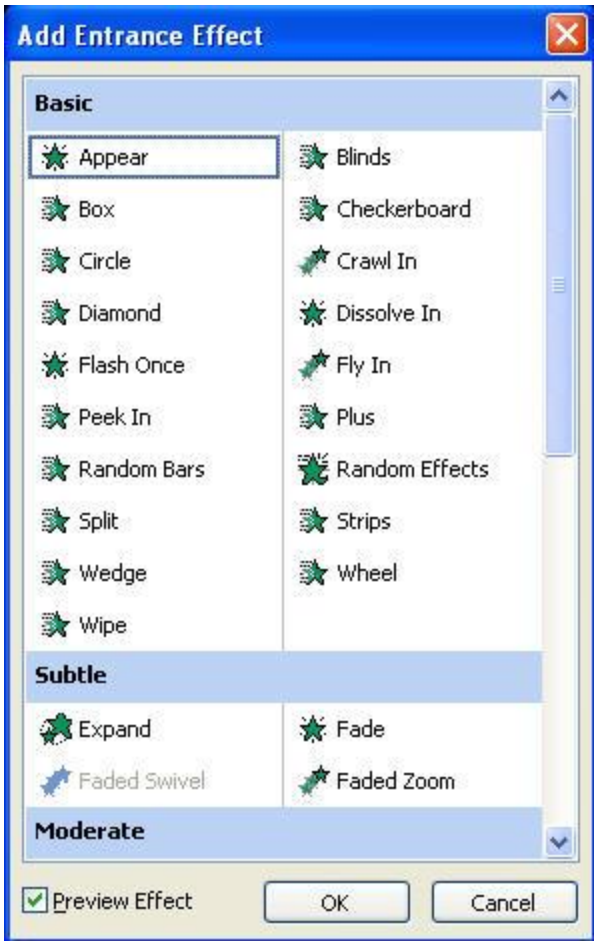
- Select the slide that you wish to apply the PowerPoint custom animation.
- From the **Slide Show** menu, select **Custom Animation** to display the **Custom Animation** pane in the right-hand side of the screen.



- Select the object in a slide i.e. text box, chart, clipart, etc that you wish to apply the animation effects.
- Click the **Add Effect** drop-down button, a menu appears with the four types listed previously. Point to the one you want, and a submenu appears.
- Choose a recently used effect from the submenu, or choose **More Effects** option to open a dialog box.



- If you opened the dialog box, make your selection. A preview of the effect appears behind the dialog box. Then, click **OK** to apply it.



- After applying the effect, use the **Start:** drop-down list at the **Modify:** section to set its start event (On Click, With Previous, or After Previous).
- If there is a property or setting in the middle drop-down list in the task pane, set it. For example, for an entrance or exit effect, there may be a **Direction:** setting (Top, Bottom, horizontal, vertical and so on).
- Open the **Speed:** drop-down list in the task pane and select the speed at which the animation should occur (Very Fast, Fast, Medium, and so on).
- Test the animation by clicking the **Play** button at the bottom of the task pane, or click the **Slide Show** button there to preview it full-screen. (If you do the latter, press **Esc** to return to **Normal** view.)

To reorder PowerPoint custom animation effects

- The animations effects that you applied are listed in the **Custom Animation** task pane.
- To reorder them, drag-and-drop them up or down on the list, or use the **Re-Order up/down** arrow buttons at the bottom of the task pane.

MS Access Tutorials - The Fundamentals

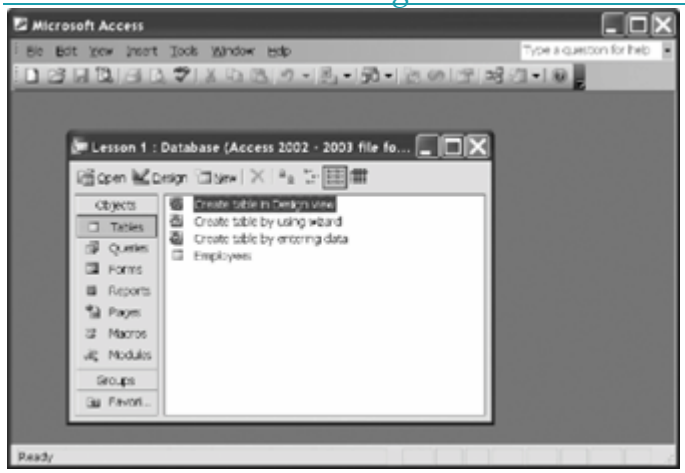
Welcome to your first lesson on Microsoft Access! Microsoft Access is a powerful database program you can use to store all kinds of information from a simple list of recipes to an inventory catalog with tens of thousands of products. Once information is stored in a Microsoft Access database, it's easy to find, analyze, and print.

Of all the programs in the Microsoft Office suite, Microsoft Access is the one that most intimidates people. "Mastering Microsoft Excel or Word was hard enough," they think. "How can I ever understand a complicated program like Access?" While it's true that Microsoft Access has many advanced features (there are computer consultants whose only job is programming Access databases), creating and working with a Microsoft Access database is probably a whole lot easier than you think.

With that in mind, this tutorial is your introduction to Microsoft Access and the world of databases. In this tutorial you will learn more about exactly what a database is, what it is used for, and how to perform simple database tasks, such as adding and deleting records. This tutorial also takes you on a basic tour of various parts of a Microsoft Access database: Tables, Forms, Reports, and Queries. If you have worked with one of the other Microsoft Office applications, such as Microsoft Excel or Word, you will find that you already know a lot about the concepts covered in this tutorial. And so, without further ado, turn the page and take your first step into the world of databases.

Introduction to Databases

...databases store and manage information related to a particular subject or purpose.



In its simplest form, a database is a collection of information that is organized into a list and stored in a manner similar to a file cabinet, as seen in figure. Whenever you make a list of information, such as names, addresses, products, or invoices, you are, in fact, creating a database. Technically speaking, you don't even have to use a database program to create a database. You can make a list of information in all kinds of programs, such as Microsoft Excel, Word even the meek and lowly Notepad program!

A database program, however, is much more powerful than a simple list you keep on paper or in a Microsoft Word document. A database program lets you:

- Store Information: A database stores lists of information that are related to a particular subject or purpose. It could be a list of aunt Mildred's home recipes, or business information, such as a list of hundreds of thousands of customers. A database also makes it easy to add, update, organize, and delete information.

- Find Information: You can easily and instantly locate information stored in a database. For example, you can find all the customers with the last name "Johnson" or all the customers who live in the 55417 zip code and are older than 65.
- Analyze and Print Information: You can perform calculations on information in a database. For example, you could calculate what percent of your total sales comes from the state of Texas. You can also present information in a professional-looking printed report.
- Manage Information: Databases make it easy to work with and manage huge amounts of information (see figure 1-2). For example, with a few keystrokes you can change the area code for hundreds of customers in the (612) area code to a new (817) area code.
- Share Information: Most database programs (including Microsoft Access) allow more than one user to view and work with the same information at once. Such databases are called databases.

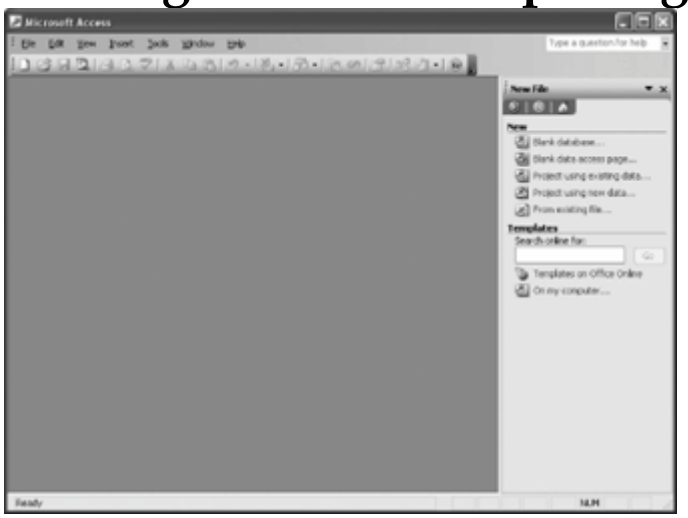
Databases usually consist of several parts. A Microsoft Access database may contain up to seven different database object types. The following table identifies the database objects you can use when creating a Microsoft Access database. Some objects you will use all the time (such as Tables), others you will hardly use (such as Modules). Table 1-1 lists various database objects and describes their uses.

Database Objects

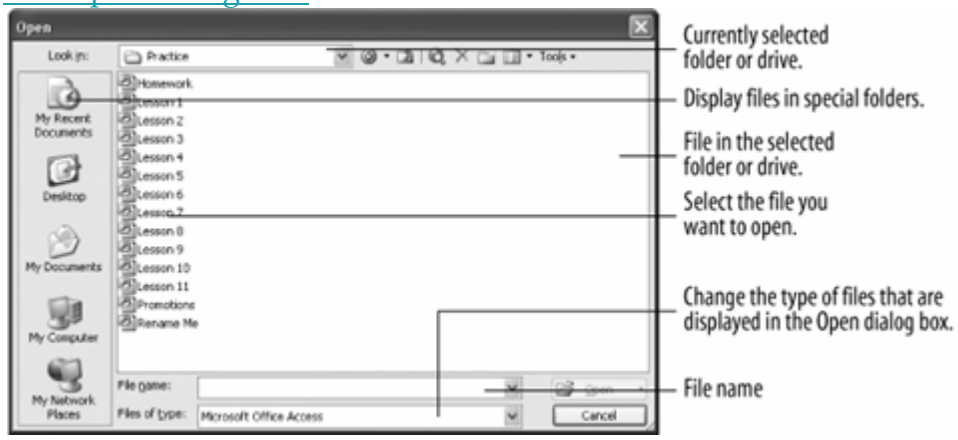
Object	Description
	Tables store a database's data in rows (records) and columns (fields). For example, one table could store a list of customers and their addresses while another table could store the customers' orders. A database must always contain at least one table where it can store information all the other are optional.
	Queries ask a question of data stored in a table. For example, a query might only display customers who are from Texas.

Object	Description
	Forms are custom screens that provide an easy way to enter and view data in a table or query.
	Reports present data from a table or query in a printed format.
	A special type of Web page designed for viewing and working with Microsoft Access data from an intranet or over the Internet.
	Macros help you perform routine tasks by automating them into a single command. For example, you could create a macro that automatically opens and prints a report.
	Like , automate tasks but by using a built-in programming language called Visual Basic or VB. Modules are much more powerful and complex than macros.

Starting Access and Opening a Database



The Open dialog box.



You start Access 2003 the same as you would start any other Windows programwith the Start button. Because every computer is set up differently (some people like to rearrange and reorder their Program menu), the procedure for Access on your computer may be slightly different from the one listed here.

1. Make sure that your computer is on and the Windows desktop appears on the screen.
2. Click the Windows 

Start button, located in the bottom-left corner of the screen.

   The .

3. Use the mouse to move the pointer over the words All Programs.

   A menu pops up to the right of All Programs. The programs and menus you see listed depend on the programs installed on your computer, so your menu will probably look somewhat different from other users' menus.

4. On the All Programs menu, move the pointer over the words Microsoft Office 2003, then point to and click Microsoft Office Access 2003.

   Once you click the Microsoft Access program, your computer's hard drive may whir for a moment while it loads Access. The Access program appears and the

task pane displays options for an existing database or creating a new database, as shown in figure.

You really can't do anything in Microsoft Access unless you open an existing database or create a new database. Most of the time you will open an existing database, and here's how to accomplish this simple task.

5. Click the  Open button on the toolbar.

Other Ways to open a File are to Press Ctrl + O, or select File » Open from the menu.

The Open dialog box appears, as shown in figure. Now you have to tell Access where the database you want to open is located.

6. Navigate to the folder where your practice files are located.
7. Find and double-click the Lesson 1 file.

Access opens the Lesson 1 database and displays it in the database window. The special in the and their descriptions are outlined in table.

Special Folders in the Open and Save As Dialog Boxes

Heading	Description
	Displays a list of files that you've recently worked on.
	Displays all the files in the the default location where Microsoft Office programs save their files.
	Displays the files and folders saved on your computer desktop.
	Displays a list of the disk drives and other hardware attached to your computer.
	Displays all the files and folders you can access on other computers.

TO START MICROSOFT ACCESS:

1. CLICK THE WINDOWS START BUTTON.
2. SELECT ALL PROGRAMS » MICROSOFT OFFICE 2003 » MICROSOFT OFFICE ACCESS 2003.

TO OPEN A DATABASE:

- CLICK THE OPEN BUTTON ON THE TOOLBAR.

OR...

- SELECT FILE » OPEN FROM THE MENU.

OR...

- PRESS CTRL + O.

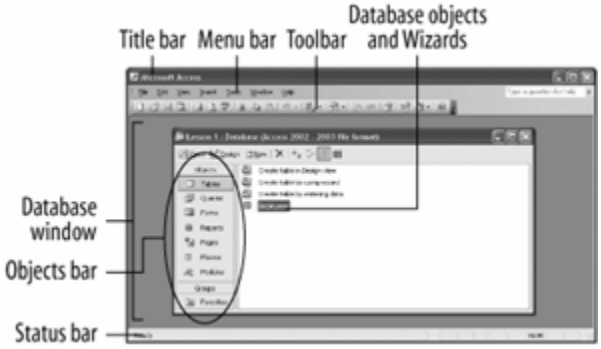
Understanding the Access Program Screen

You might find the Access 2003 program screen a bit confusing and overwhelming the first time you see it. What are all those buttons, icons, menus, and arrows for? This lesson will help you become familiar with the Access program screen. There are no step-by-step instructions in this lesson all you have to do is look at figure and then refer to figure for details about each item. And, most of all, relax! This lesson is only meant to help you get acquainted with the Access screen you don't have to memorize anything.

Don't worry if you find some of these objects confusing at firs tthey will make more sense after you've actually used them.

One more important note about the Access program screen: We have been examining the in this lesson, but it is by no means the only screen that you will encounter in Microsoft Access. Just as there are several different types of in Microsoft Access, there are also dozens of different program screens something that makes Access quite different from its Microsoft Office cousins Word and Excel. You will see some of these screens as we continue this tutorial's tour of Microsoft Access.

The Microsoft Access screen.



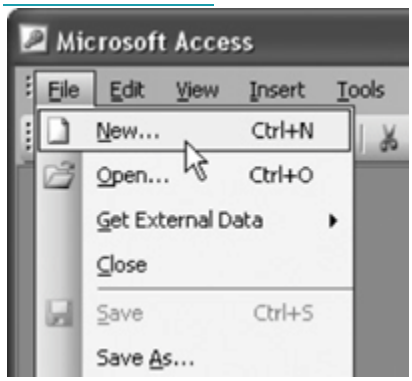
The Access Program Screen

Element	What It's Used For
Title bar	Displays the name of the program you are currently using (in this case, Microsoft Access). The title bar appears at the top of all Windows programs.
Menu bar	Displays a list of menus you use to give commands to Access. Clicking a menu name displays a list of commands for example, clicking the Edit menu name would display different formatting commands.
Toolbar	Toolbars are shortcuts they contain buttons for the most commonly used commands (instead of having to wade through several menus). The toolbars in Access change depending on what you are working on. The database toolbar (the toolbar currently displayed) contains buttons for the Access commands that you will use most often, such as opening and printing databases.
Database	The command center for a database, the Database window, allows you to

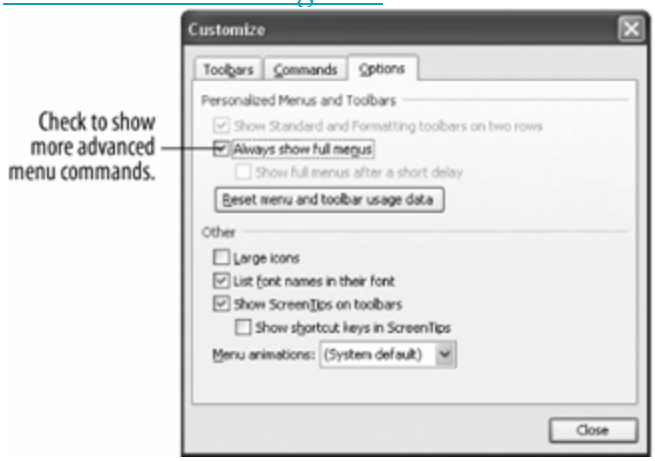
Element	What It's Used For
window	view, create, edit, and modify database objects.
Objects bar	The Objects bar categorizes the different types of database objects. Each type of database object has its own iconto view a type of object, click its icon on the Objects bar.
Database objects	Database objects are the basic components that make up a database. Database objects include tables, queries, forms, reports, pages, macros, and modules.
Status bar	Displays messages and feedback. The Status bar is especially important in Access since it can give you meaningful information and messages when you are entering information into a database.

Using Menus

The File menu.



The Customize dialog box.



This lesson explains one of the best ways to give commands to Accessby using the . Menus for all Windows programs can be found at the top of a window, just beneath the program's title bar. In figure, notice the words File, Edit, View, Insert, and Tools. The next steps will show you why they're there.

1. Click the word File on the menu bar.

   A menu drops down from the word File, as shown in figure. The File menu contains a list of file-related commands, such as New, which creates a new file; Open, which opens or loads a saved file; Save, which saves the currently opened file; and Close, which closes the currently opened file. Move on to the next step to try selecting a command from the File menu.

2. Click the word Open in the File menu.

   The Open dialog box appears. You don't need to open a database quite yet, so...

3. Click the Cancel button to close the Open dialog box.

   Notice that each of the words in the menu has an underlined letter somewhere in it. For example, the "F" in the File menu is underlined. Holding down the Alt key and pressing the underlined letter in a menu does the same thing as clicking it.

For example, pressing the Alt key and then the F key would open the File menu. Move on to the next step and try it for yourself.

4. Press the Alt key and then press the F key.

   The File menu appears. Once you open a menu, you can navigate to a different menu by using either the mouse or the Alt key and the letter that is underlined in the menu name.

   If you open a menu and then change your mind, it is easy to close it without selecting any commands. Click anywhere outside the menu or press the Esc key.

5. Click anywhere outside the menu to close the menu without issuing any commands.

   The menus in Access 2003 work quite a bit differently than in other Windows programs even previous versions of Access! Microsoft Access 2003 displays its menu commands on the screen in three different ways:

   - By displaying every command possible, just like most Windows programs, including earlier versions of Access.
   - By hiding from view the commands you don't use as frequently (the more advanced commands).
   - By displaying the hidden commands if you click the downward-pointing arrows at the bottom of the menu or keep the menu open for a few seconds.

6. Click the word Tools in the menu.

   The most common menu commands appear in the . Some people feel intimidated when confronted with so many menu options, so the menus in Office XP don't display the more advanced commands at first. To display a menu's advanced commands, either click the downward-pointing arrow at the bottom of the menu or keep the menu open for a few seconds.

7. Click the downward-pointing arrow at the bottom of the .

   The more advanced commands appear shaded on the Tools menu.

   If there isn't a downward-pointing arrow at the bottom of the Tools menu, skip this step and move on to Step 8.

   If you're accustomed to working with earlier versions of Microsoft Office, you may find that hiding the more advanced commands is disconcerting. If so, you can easily change how the work. Here's how:

8. Select View » Toolbars » Customize from the menu and click the Options tab.

   The appears, as shown in figure. This is where you can change how Access's menus work. There are two check boxes here that are important:

   - Always show full menus: Clear this check box if you want to hide the advanced commands.
   - Show full menus after a short delay: If this option is checked, Access waits a few seconds before displaying the more advanced commands on a menu.

9. Click Close.

See table below for the menus in Access and their descriptions.

Menus Found in Microsoft Access

Menu Item	Description
File	File-related commands to open, close, print, and create new files.
Edit	Commands to copy, cut, paste, find, and replace text.
View	Commands to change how the screen is displayed.
Insert	Items that you can insert into a database, such as graphics and charts.

Menu Item	Description
Format	Commands to format fonts, cell alignment, and borders.
Records	Commands to add, delete, sort, and filter information.
Tools	Tools such as the spell checker and macros. You can also change the default options for Microsoft Access here.
Window	Commands to display and arrange multiple windows (if you have more than one file open).
Help	Provides help with using Microsoft Access.

TO OPEN A MENU:

- CLICK THE MENU NAME WITH THE MOUSE.

OR...

- PRESS ALT AND THEN THE UNDERLINED LETTER IN THE MENU.

TO DISPLAY A MENU'S HIDDEN COMMANDS:

- CLICK THE DOWNWARD-POINTING ARROW AT THE BOTTOM OF THE MENU.

OR...

- OPEN THE MENU AND WAIT A FEW SECONDS.

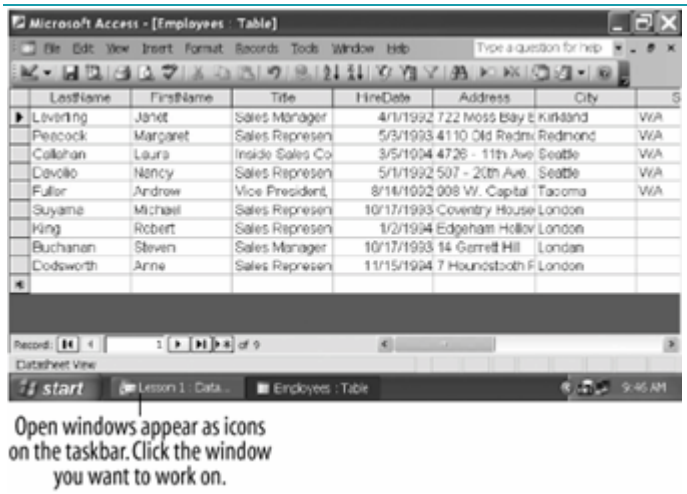
TO CHANGE HOW MENUS WORK:

1. SELECT VIEW » TOOLBARS » CUSTOMIZE FROM THE MENU AND CLICK THE OPTIONS TAB.

2. CHECK OR CLEAR EITHER THE ALWAYS SHOW FULL MENUS AND/OR SHOW FULL MENUS AFTER A SHORT DELAY OPTIONS, THEN CLICK CLOSE.
3. CHECK ALWAYS SHOW FULL MENUS TO SHOW MORE ADVANCED MENU COMMANDS.

Working with Multiple Windows

Use the Windows taskbar to view and move between open windows.



Display two windows at the same time by selecting Window » Tile Horizontally from the menu.

One of the many benefits of working with Windows is that you can open and work with several windows at once. Working with is particularly important in Access because each database object you open appears in its own window and you will often have to switch between those windows. The Database window always remains openclosing the Database window closes the current database.

This lesson explains how to open and work with more than one window. You will also learn some tricks on changing the size of a window, moving a window, and arranging a window.

1. Click the Tables icon on the Objects bar to display the tables in the current database.

   Access displays all the tables in the current database.

2. Double-click the Employees table icon.

   Remember that to open any database object, you can select the object and click the Open button in the Database window or just double-click the database object.

   The Employees table appears in its own window. The Database window is still open too, although you may not be able to see it because it's behind the Employees table window.

   One of the big changes in Access 2003 is that each open window appears as an icon on the Windows taskbar, as shown in figure. To switch to a different document, click its icon on the taskbar.

3. Click the Lesson 1: Database icon on the Windows taskbar.

   Another way to switch between windows is to select Window from the menu bar and then select the window you want to view.

The Database window appears. The Employees table window is still open, but you can't see all of it because it is located behind the Database window.

Sometimes it can be helpful to view two or more windows on your screen at the same time. When you want to do this, you use the Window menu to select a tile option. Move on to the next step to try this for yourself.

4. Select Window » Tile Horizontally from the menu.

   Both windowsthe Database window and the Employees table window appear on top of each other, as shown in figure. Sometimes it's useful to look at more than one window at a time. Notice how the title bar for the Employees table window is a different color than the Database window? That's because the Database window is active, meaning it's the window or document you're currently working on. The other window, Employees table, is inactive.

5. Click anywhere in the Employees table window.

   The Employees table window becomes active and the Database window becomes inactive.

   To make working with several windows at once easier, you can change the size of the windows. You can maximize or enlarge a window so that it takes up the document window.

6. Click the  Maximize button in the Employees table window title bar.

   The Employees table window maximizes and fills the entire screen. You can change a maximized window back to its original size by clicking the Restore button, which replaces the Maximize button whenever a window is maximized.

7. Click the  Restore button in the Employees table window title bar to restore the Employees table window to its previous size.

   Make sure you click the lower Restore buttonthe Restore button for the Employees table windowand not the Restore button for the Access program. The window returns to its previous size.

   You can also manually fine-tune a window's size to meet your own specific needs. A window must not be in a maximized state if you want to manually size it.

8. Position the mouse pointer over the top edge of the Employees table window until it changes to a  .

   The arrows point in two directions, indicating that you can drag the window's border up or down.

   The mouse is very picky about where you place the pointer, and sometimes it can be a little tricky finding the exact spot where the pointer changes.

9. While the  pointer is still over the top edge of the window, click and drag the mouse up a half-inch to move the window border, and release the mouse button.

   Notice how the window border follows as you drag the mouse. When the window is the size you want, you can release the mouse button to resize the window. You just resized the window by adjusting the top edge of a window, but you can also adjust the left, right, and bottom edges of a window.

   Sometimes when you have more than one window open at once, you may find that one window covers another window or other items on your

screen. When this happens, you can simply move the window to a new location on the screenjust like you would move a report or folder to a new location on your desk.

10. Click and drag the title bar of the Employees table window to a new location on the screen. Release the mouse button to drop the window.

    Remember that the title bar is at the top of the window or program and displays the name of the window or program.

11. Click on the Close button to close the Employees table window.

That's all there is to working with multiple windows!

TO SWITCH BETWEEN MULTIPLE OPEN DOCUMENTS:

- CLICK THE DOCUMENT ON THE WINDOWS TASKBAR.

OR...

- SELECT WINDOW AND SELECT THE NAME OF THE DOCUMENT YOU WANT TO VIEW.

TO VIEW MULTIPLE WINDOWS AT THE SAME TIME:

- SELECT WINDOW FROM THE MENU BAR AND SELECT TILE HORIZONTALLY, TILE VERTICALLY, OR CASCADE FROM THE MENU.

TO MAXIMIZE A WINDOW:

- CLICK THE WINDOW'S MAXIMIZE BUTTON.

TO RESTORE A WINDOW:

- CLICK THE WINDOW'S RESTORE BUTTON.

TO MANUALLY RESIZE A WINDOW:

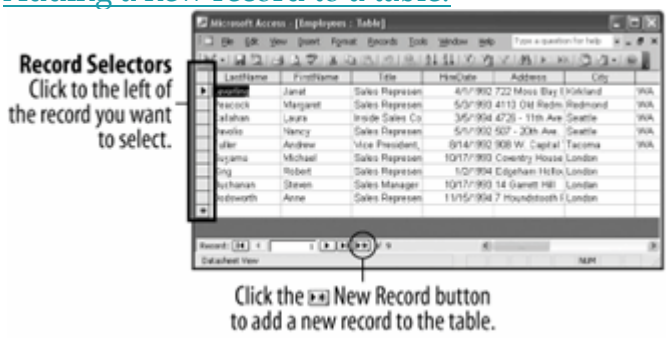
- CLICK AND DRAG ANY OF THE WINDOW'S BORDERS.

TO MOVE A WINDOW:

- DRAG THE WINDOW'S TITLE BAR TO THE LOCATION WHERE YOU WANT TO POSITION THE WINDOW

Adding, Editing, and Deleting Records

Adding a new record to a table.



You can easily add, change, or delete the records in your table. For example, you might want to add a record to store information about a new employee, change an existing record when an employee's address changes, or delete a record for an employee who no longer works for the company. This lesson explains how to do all three of these tasks. First, here's how to add a record to a table:

1. Click the on the Record Navigation bar, as shown in Figure.

   Other ways to add a new record are to press Ctrl + +, or click the New Record button on the datasheet toolbar.

The record selector jumps to the blank row at the end of the table and the blinking insertion point (|) appears in the first LastName field.

2. Enter your last name in the LastName field.

   If you make a mistake you can press the Backspace key to correct it.

   Once you have finished entering data into a field you can press Tab or Enter to move to the next field or Shift + Tab to move to the previous field.

3. Press Tab to move to the next field and enter your first name.

   Getting the hang of this data entry stuff? Move on to the next step and finish entering the new record.

4. Complete the record by entering your own information into each respective field (enter today's date for the hire date). Remember to press Tab to move to the next field.

   When you have finished adding or editing a record, move to any other record to save your changes.

   Finished entering all that information? Super! When you enter data, you don't have to click a Save button to save the informationAccess automatically saves the information as you enter it. Neat, huh?

   You can also make changes to the records in a table at any time. To edit a record, simply click the field you want to edit and make the changes. Let's try it!

5. Position the mouse over the left edge of the Title cell in your record (the I pointer changes to a) and then click to select the cell.

When a cell has been selected, anything you type will replace the original contents.

6. Type Inside Sales Coordinator.

   The text "Inside Sales Coordinator" replaces the original contents of the Title field in your record. You might want to glance at table, which lists several keys that are very important for editing and changing the contents of a field.

7. When you have finished making the change, press Tab.

   You can permanently delete records that you no longer need from a table. Here's how:

8. Place the insertion point anywhere in the record you just added.
9. Click the  on the toolbar.

   Other ways to delete a record are to click the row selector for the record you want to delete and press Delete, or right-click the row selector of the record you want to delete and select Delete Rows from the shortcut menu.

   The record disappears and a warning dialog box appears, asking you to confirm the deletion.

10. Click Yes to confirm the deletion and then close the table.

Congratulations! While it may not seem like you have gone over very much, you have just learned the ins and outs of data entry with Accessthe most important (and boring) database task of all!

Helpful Editing Keys

Key(s)	Description

Key(s)	Description
Tab or Enter	Moves to the next field in the table. If you're at the last field or cell in a table, pressing Tab or Enter will save your changes and move to the first field in the next record.
Esc	The is the "Wait, I've changed my mind" key. Press Esc to cancel any changes you've made to a record.
↑, ↓, ←, or »	Use the to move between fields and records. If you are editing a field, pressing the left and right arrow keys will move the insertion point one character to the left or right.
Delete	Nothing surprising here. The deletes or erases whatever is selectedtext, cell contents, even entire records. If you're working with text, the Delete key erases characters to the right of the insertion point.
Backspace	Use the to fix your typing mistakesit erases characters to the left of the insertion point.

TO ADD A NEW RECORD:

1. CLICK THE NEW RECORD NAVIGATION BUTTON.

   OR...

   CLICK THE NEW RECORD BUTTON ON THE TOOLBAR.

   OR...

   PRESS CTRL + +.

2. ENTER THE RECORD INFORMATION FOR THE FIELD, PRESSING TAB TO MOVE TO THE NEXT FIELD AND SHIFT + TAB TO MOVE TO THE PREVIOUS FIELD.

TO EDIT A RECORD:

- CLICK THE FIELD YOU WANT TO EDIT AND MAKE THE CHANGES.

TO DELETE A RECORD:

- PLACE THE INSERTION POINT ANYWHERE IN THE RECORD AND CLICK THE DELETE RECORD BUTTON ON THE TOOLBAR.