

**Introduction:**

Windows is an operating system launched by Microsoft Corporation. It is totally graphical based operating system. It also gives a platform to the application software to run on itself. In this environment user can communicate with the help of icons.

Characteristic of Windows:

1. GUI (Graphical User Interface)
2. Clip Board Memory (Cut & Paste)
3. Multitasking
4. OLE (Object Linking & Embedding)
5. What you see is what you get.
6. Plug & Play Utility

**GUI** stands for Graphical User Interface: This is the first characteristic of windows by which windows become so famous. Through this feature, a user can communicate with the help of Icons. (The graphical representation of any program or file is called as Icon).

**Clip Board (Cut & Paste):** Clip board is a memory where data is stored after using cut or copy action. This is a volatile memory because when we shutdown our computer this data will be lost. The capacity of clip board memory is 24 clips.

**Multitasking:** To run more than one program at a time is called as Multitasking. Since Windows allows multitasking so we can say, Windows gives a facility to the user to run more than one program at a time.

**OLE (Object Linking & Embedding):** Through this feature user can link their file to any another file. The facility to link any file to other file is called as linking & changing in the object or modify the file is called as embedding.

**What you see is what you get:** Through this facility we can print our file actually as it is shown in the document.

**Plug & Play Utility:** Through this feature the computer detects any hardware port when it is plugged into the computer system. The hardware is detected automatically and Windows gives the facility to the user to use this device.

**Different version of Windows:**

Win - 3.0 , 3.1, 95, 98, 98 SE, ME, Win NT, 2000, 2000 Server, 2000 Professional, Win XP, Win XP Home Edition, Win Server 2003, XP Professional, Win XP SP1, Win XP SP2, Win XP SP3, Win Vista, Win Server 2008

**Booting Computer in Windows mode:**

When we switch on the computer, first of all it loads operating system (all necessary files of Windows to startup) in the working memory (RAM) and checks all hardware parts of computer. This process is known as booting. After booting we get a screen which is known as desktop.

**Desktop Feature:**

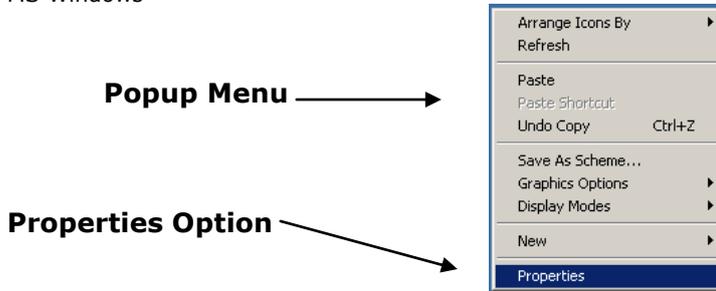
After booting the computer in Windows mode, the area displayed on the screen is known as Desktop. On desktop, we get Icons, Mouse Pointer, Start menu, Task Bar etc.

**Background:**

The display of Screen which is behind the icons is known as the Background of Desktop. We can set or change it. We can change the background through following ways:

**Changing the Background & Screen Saver:**

Right Click (in a free Space) on Desktop → A popup menu displays →

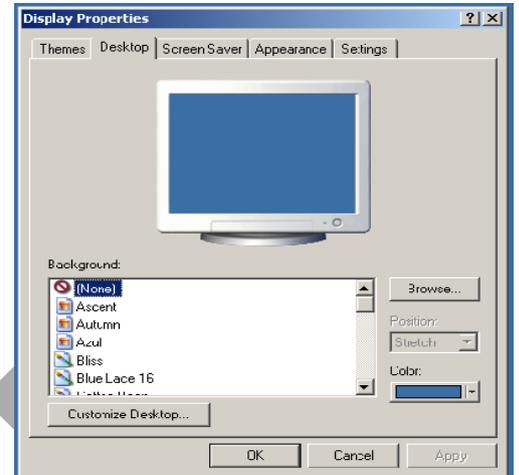


*Fig: 1.7 Popup Menu on free space at Desktop*

Click on "**Properties**" option, a dialog box, "Display Properties" appears. In this dialog box we get Desktop Tab. Click on Desktop Tab → Choose the background file (we can also choose another file on different location for the background with the help of Browse option) → Set this background as (Tiled, Center or Stretch) by using Position option → Apply it and Click on OK.

### Screen Saver:

Screen Saver is a graphical program which starts automatically when the computer is left idle for quite some time (Wait Time). It protects the screen and when user touches the mouse or hit keyboard, it automatically disappears. Screen Saver starts automatically after a fixed time as user feed it. There are different types of screen savers; user can change it and set it as he/she wants. We can change or set the screen saver in following ways:



*Fig: 1.8 display Properties Dialog box*

Right Click on Desktop → Choose the "Properties" option in popup menu → A dialog box "Display Properties" appears. Choose Screen Saver Tab → Choose the type of Screen Saver as you want to set → After this give the wait time of Screen Saver → To check it click on preview option → To apply it, click on Apply Button → and finally click on OK button.

### Start Button:

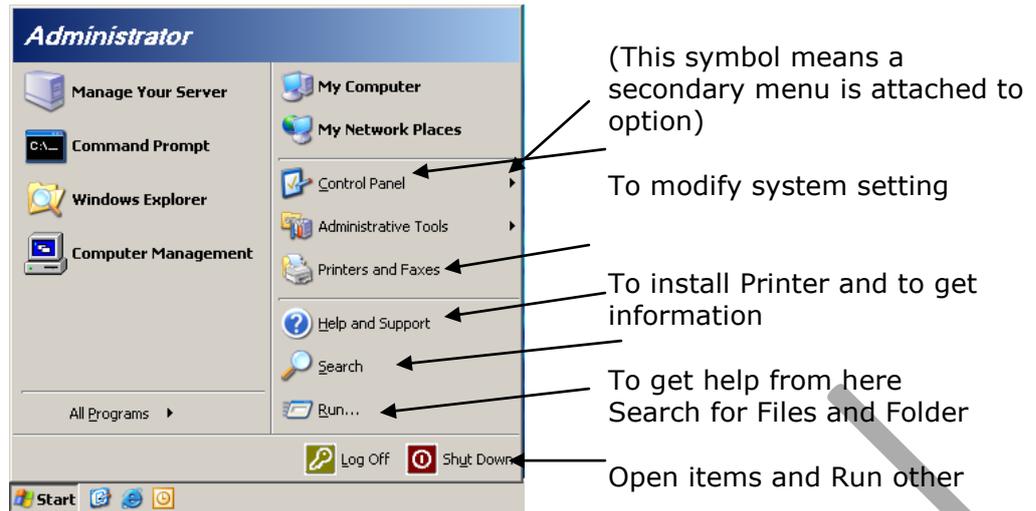
At the extreme bottom on desktop we get a bar called as "Task bar". On this Task bar we get a very important button better known as "Start" button. Click on start button and start menu appears in the form of a list. Start menu contains many options related to the computer system & programs. Here we get all programs option to start any program which is loaded in our computer system, Search option to the search the files & folders, Help & Support, Control Panel for the setting of computer programs, Hardware parts and Printer & Fax setting, Run option to run any program etc. All the running tasks (programs) is displayed on task bar.

### Quick Launch Icons:

Those icons which are displayed on the task bar are known as Quick Launch Icons. By these icons we can start any program directly & also minimize the entire window at a time (Show desktop icon). We can also include new programs in it.

### System Tray (Date & Time):

In the system tray we can see some icons of system software which are currently activated or deactivated. One can Set the date & time of computer system & manage the task bar. To set the date & time of computer system double click on task bar where date & time are being displayed. Now we can adjust our system date & time according to our desire.



*Fig: 1.4 Start Button*

### Mouse:

It's an input device. Some times it is also taken as pointing device. We input data and instructions through mouse. Apart from these we can point or select any item or object with the help of mouse. Generally it has two buttons, called as left button and right button respectively. Some mouse has three buttons. Sometime we have a wheel between the buttons of the mouse; through which scrolling can be done (These mice are known as Scroll Mouse).

### Single click:

Clicking (pressing and immediately releasing the mouse button) once the left button of mouse is known as single click. We can choose or select the item by single click. To select the item press left button of your mouse on the item and then release immediately.

### Double click:

Double click is the method by which we can open any folder or file. To double click, press the left button of mouse twice quickly.

### Drag & Drop:

Drag & Drop is an action by which we can drag our files or folders from one position to another. To drag any file or folder, click the left button of the mouse and without releasing the same drag it till the target position, now release the left button. Thus the file or folder can be moved from one position to another.

### Right Click:

Clicking the Right button of mouse is known as right click. Right click is a special command by which we can find out related option about the selected item in a listed format. For Right Click, click right button of mouse once. As you press the right button of mouse, a popup menu appears and it displays some related option in it to choose from. To choose any option, click on it once.

### Terminologies about the topics:

#### Desktop:

The very first window which displays different icons like My Computer, My Documents, and Recycle Bin etc is known as Desktop. At the background we can place some pictures known as wallpaper.

#### Icon:

A graphical representation of a program, file, folder, or application etc is known as an Icon. There are three types of Icons.

**System Icon:** These icons are related with the computer system, through which we can get any information about the system.

**Program Icon:** These icons are related with the programs of computer system; through which we can start any program on our computer system.

**Folder Icon:** These icons are created by the user which can be any file or any folder. To open any file or folder, simply double click on its icon.

**Folder:**

Folder is a specific in any of the secondary memories space where user can store their files. We can make a new folder through the following ways:

Firstly select that location where you want to create a new folder. Click the right button of mouse on free space. A popup menu appears on the screen. Choose the "New" option and again a submenu appears. Choose the "New Folder" Option. A new folder will be created on the selected location. The name of the new folder will be seen selected. Simply type the name of the folder. Folder is created.

**Subfolders:**

A folder which is created in an existing folder is known as Subfolder. We can create more than one folder in a selected folder and all folders will be called as subfolders. *To create a new subfolder, select the folder where you want to create a new subfolder. Open the folder and press the right button of mouse in a free space. Choose the "New" option in the popup menu and a submenus appears and then choose the Folder option. A new folder appears. Give a name to this subfolder.*

**File:**

The data which is now stored in a folder or a sub folder is called as a file. We even can store a file in root directory too; but it is strongly recommended to store the same in a folder or sub folder. File can be saved while working on a software through its "Save As" command. The changes in the file can be saved through "Save" command.

**My Computer:**

My computer is a system icon. It contains the information about our computer system. We can get the information regarding hard drive, floppy drive, CD drive & Document etc through My Computer. Any drive can be opened directly by clicking the icons of the drives in MY Computer window. It can also show the information about the drive which are selected. It gives the information about My Document, My Network Place, Shared Document, Control Panel etc. We can also change or modify the settings of the selected item.

**My Document:**

My Document is a storage location created by Windows, where all files are saved by default when user does not specify any specific location to save the file. This is the default location where the files are stored when a user chooses the save option.

**Recycle Bin:**

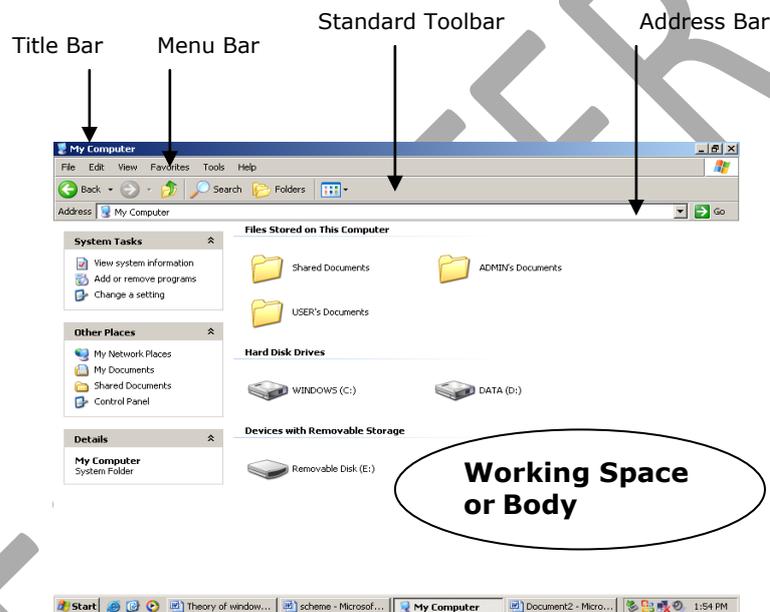
It's again a by default location where all our deleted file and folders are stored. This is a system icon & found at Desktop. The deleted files or folders can be restored or deleted permanently from the recycle bin. Open Recycle Bin and select any item in it. Now one can delete the item by pressing the delete key on keyboard. After pressing the delete key the files or folder will be deleted permanently from Recycle Bin. If we want to restore the file or folder, right click on it. A list of options is displayed in a popup menu (Restore, Delete, Cut) choose the option what you want to do. Press the restore option to restore the file. Through "CUT" option we can remove the file from Recycle Bin and can paste the same at any other desired location.

### My Network Places:

It is also a system icon. It contains the information about the network of computers. Through My Network Places we can get the information as to how many computers are connected with our computer. We can share the data & information from this location.



*Fig 1.5: Desktop of Windows*



### Window:

A rectangular area on the screen where any program can run or start is known as window of the program.

### Different Bars in a window:

There are different bars in a window. These are as following-

**Title Bar:** At the top position of any window we get a bar that is known as Title Bar. Title Bar Displays the title of the program and the file name in the left side of the bar and in the right side we get three buttons that are Minimize, Restore, and Close.

**Menu Bar:** Menu bar appears beneath title bar. On menu bar we get different menus to ease out of our work. In each menu we get sub menus or the options related to the program.

**Tool Bar:** Toolbar appears below the menu bar. Toolbar contains the tools by which we can work in the work space. Many tools are available in tool bar. The tools in the tool bar are used for quick and rapid computing action.

**Address Bar:** This bar is used to give the address of the location where we want to store the data or want to go to any selected destination. (e.g.: My computer, Local Disk C:\, D:\ etc.)

**Task Bar:** Task Bar displays at the bottom of the window. On Task Bar we get the information about the task that how many programs are opened currently.

### Use of (Minimize, Maximize/Restore & Close Buttons)

Minimize, Maximize/Restore and Close Buttons are available on the Title Bar at the extreme right side. They all have their different application as given below.

#### Minimize Button:

This button appears on the title bar at the left side of restore button. If we press this button, the window shrinks and is placed within the task bar. To restore this window to its previous position, just click the tab of the related windows at task bar.

#### Restore Button:

This button appears in the middle of minimize & close button on the title bar at the right side. This button is used to restore the size of the window. After pressing the left button of mouse on restore button the size of window becomes small. We can also adjust it according to our requirements.

#### Maximize Button:

This button appears after restoring the window size. We can maximize the screen area by clicking this button. Again if pressed, it reduces the screen area; so that items beneath this window can be seen.

#### Close Button:

This button appears on the title bar at right position of the restore button. This button is used to close the program window. While working on any software if close button is pressed, you will be prompt to save the changes made to the file. Make sure to press on "Yes" button to save the file and to prevent the data loss.

#### Cut, copy & Paste:

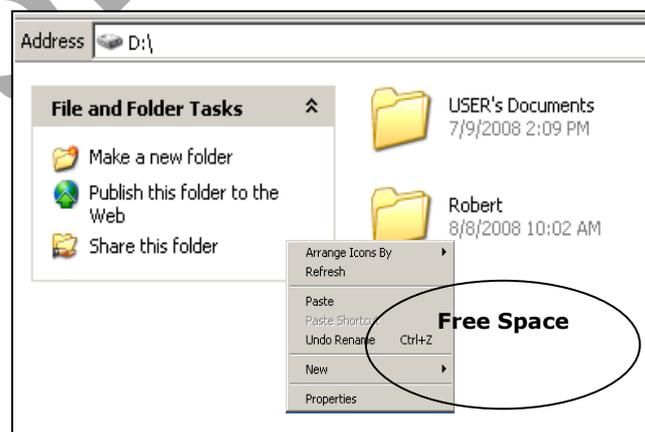
**Cut:** Removing any folder (Item) from its location in such a way that the same can be fixed at some other location, it called "**Cut**".

**Copy:** Making copy of any folder (Item) from any location in such a way that the copy can be fixed at any other location is called "**Copy**".

**Paste:** Fixing any already cut or copied Folder (Item) at any new location is called "**Paste**".

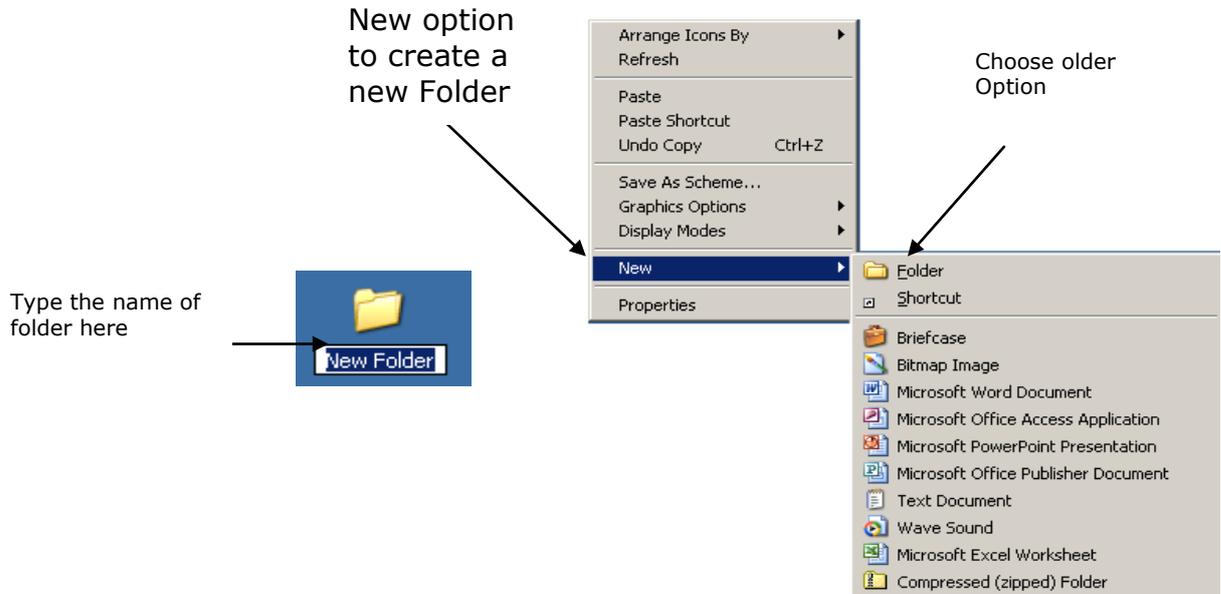
#### Folder Creation & Browsing through My Computer:

Firstly select that location (Suppose D:\ Drive) where you want to create a new folder.



*Fig: 1.9 Free space for creating New Folder*

To choose the location, open My Computer and open D:\ Drive. Click the right button of mouse on any free space. As you click the right button of mouse, a popup menu appears on the screen. Click on the **"New"** option and again a submenu appears. Click on the **"Folder"** Option.

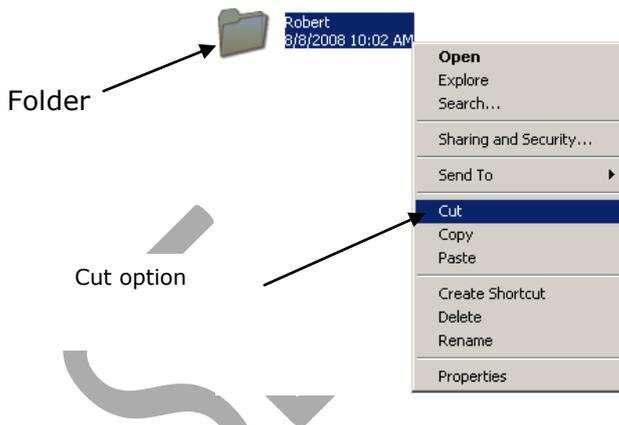


*Fig: 1.10 Folder Creation*

A new folder will be created on the selected location. Type the name of the folder

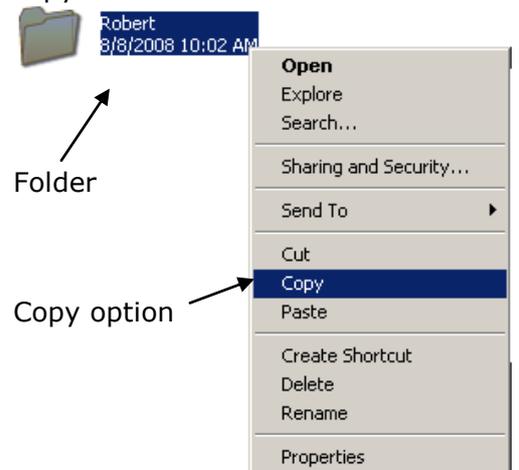
**Cut a folder:**

- Step 1: To cut a folder choose folder that you wants to cut
- Step 2: Right Click on the folder
- Step 3: Popup menu appears and click on "Cut" Option



**Copy a folder:**

- Step 1: To copy a folder choose folder that you wants to copy
- Step 2: Right Click on the folder
- Step 3: Popup menu appears and choose "Copy" Option



After using cut or copy option we can paste folder at any selected location

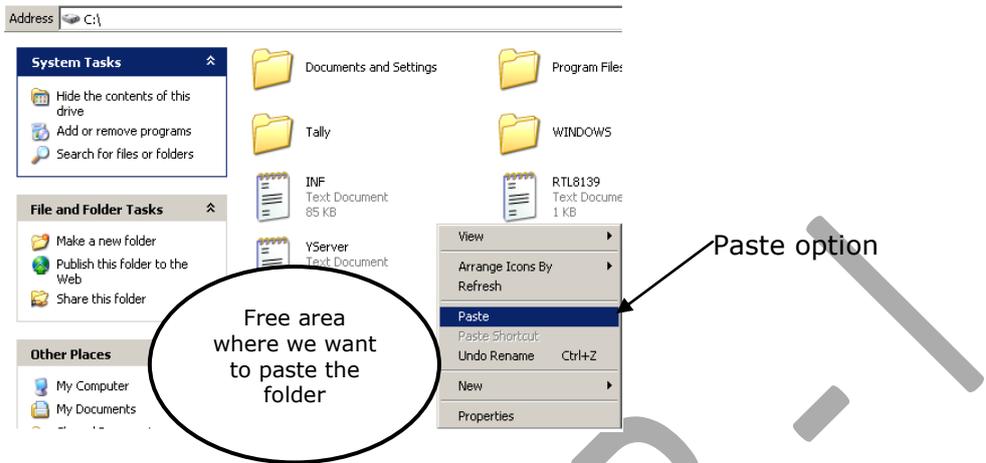
**Paste:**

To paste a folder after using cut or copy option

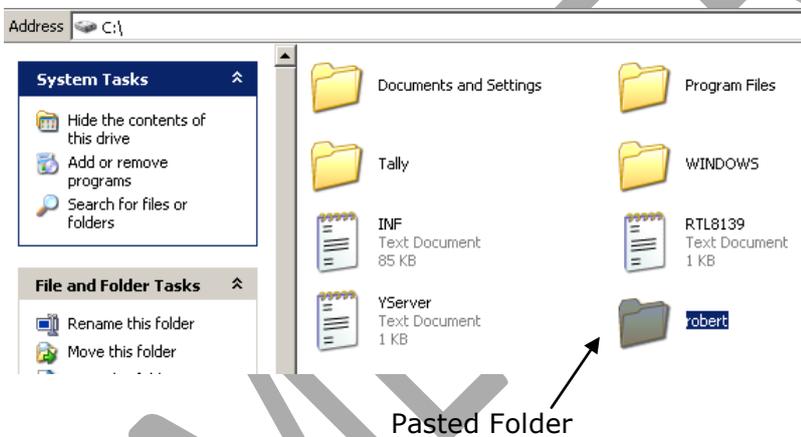
Step 1: choose the location where you want to paste the folder

Step 2: Click the right button of mouse on a free or selected area

Step 3: A popup menu appears, click on the paste option



After using paste option we can see the folder (which was previously cut or copied)



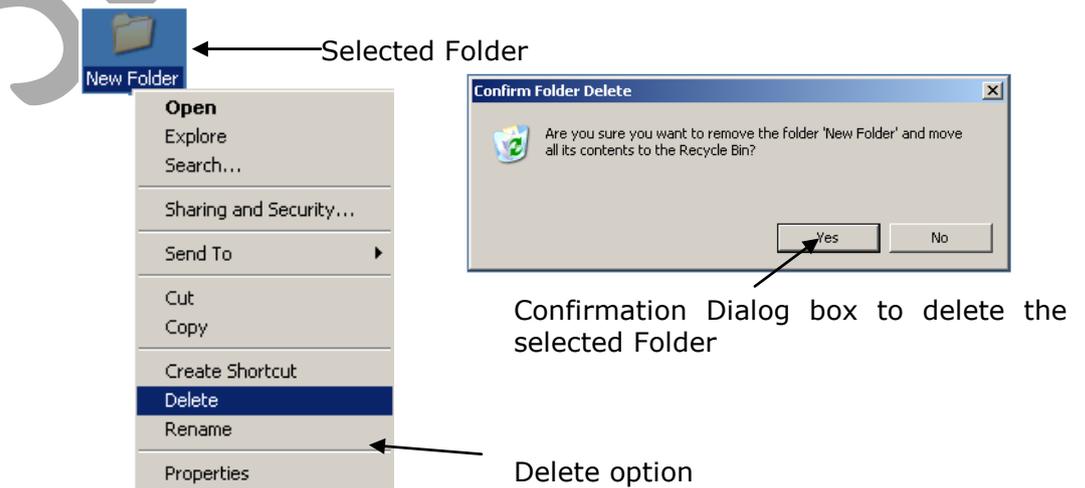
**To delete a folder:**

Step 1: Choose the folder

Step 2: Right Click on selected folder

Step 3: A Popup menu appears, choose "Delete" option

Step 4: A dialog box displays to make sure that you want to delete the folder

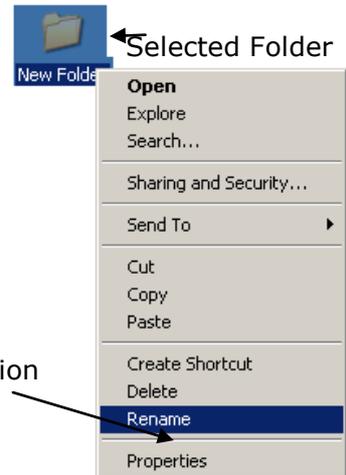


Step 5: Click on "Yes" option to send your folder in recycle bin.

### Rename a folder

To change the name of a folder

Step 1: Choose the folder which you have to rename



Step 2: Right Click on folder

Step 3: Choose "Rename" option

Step 4: Type the name of folder as you want



New name of folder

Rename option

### Use of My Network Places:

We can share our data, file or folder from one computer to another by using the My Network Place & also get the information about the attached computers. Apart from the data sharing, we also can share the resources like printers and others peripherals connected with the network. Using client & server based software we can use the application software in multi user interface where data is stored on a main computer called as server and on all nodes we get the interface of the software.

To share the data, file or folder or get the information of attached computer

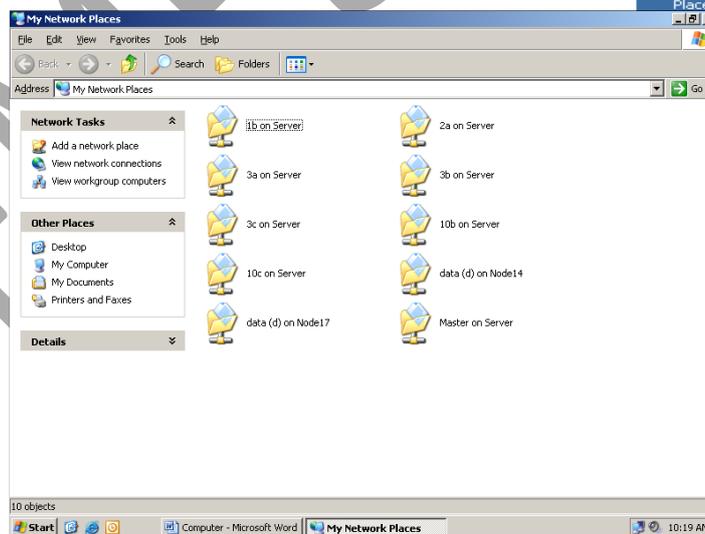
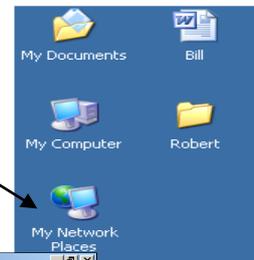
Step 1: Open My Network Place Folder from desktop

Step 2: You will get the list of attached computer or drives

*My Network Place*

Step 3: Right click on given node icon.

Step 4: Chose open option to get more information about the

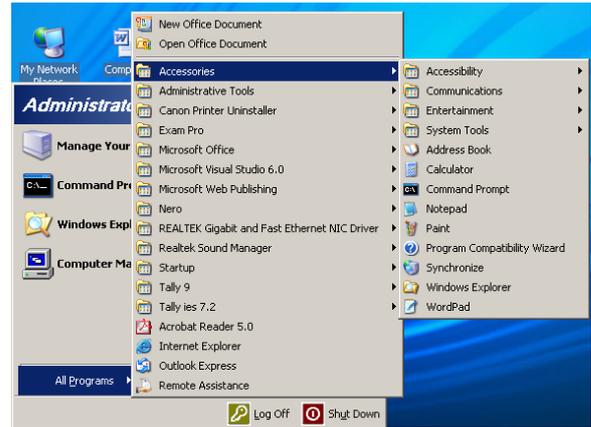


### Clipboard:

The clipboard is a temporary storage space for data that is being copied or moved. The clipboard generally stores only one set of data which can be almost of any size of length. The contents of the clipboard are cleared each time when you select a new set of data and choose either cut or copy command again. Clipboard is a memory where data are stored after using cut or copy option. This is a volatile memory because when we shut our computer this data will be lost. The capacity of clipboard memory is of 24 clips.

**Basic Windows Accessories:**

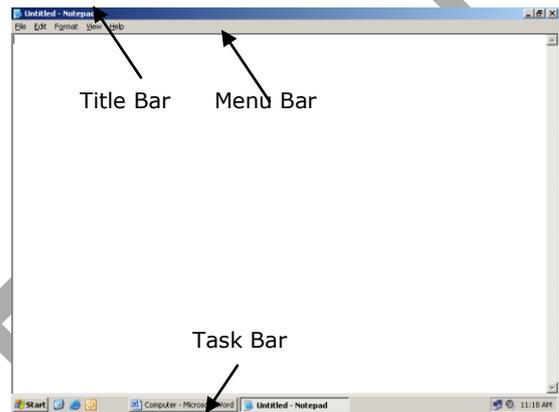
The Windows operating system comes equipped with basic accessories software like Calculator, Paint, Notepad, WordPad etc.



**Notepad:**

It's a Windows by default application software. It's a word processor used for typing. Note pad can be used to open files that do not need formatting and are less than 64K

*To open Notepad click Start → Point to All Programs → Point to Accessories → and then click → Notepad.*

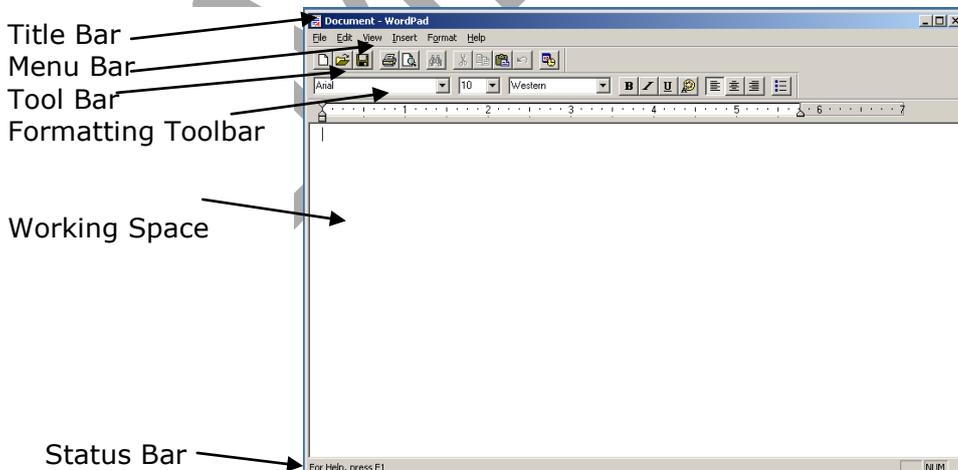


*A Typical window of Note Pad*

**Word pad:**

It's a text editing software which can be used to create and edit simple text documents or documents with complex formatting and graphics. Word pad is used to open and format small document larger than 64K.

*To open WordPad click Start → Point to All Programs → Point to Accessories → and then click WordPad.*

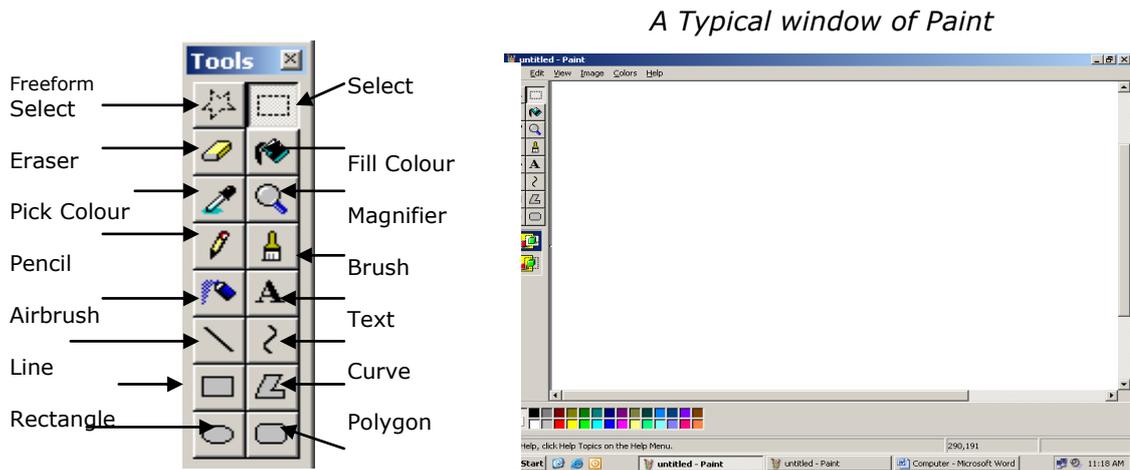


*A Typical window of Word Pad*

**Paint:**

Paint is used to create, edit and view pictures. We can paste a Paint picture into another document which we have created. A Paint picture can be set as desktop background. We can even use Paint to view and edit scanned photos.

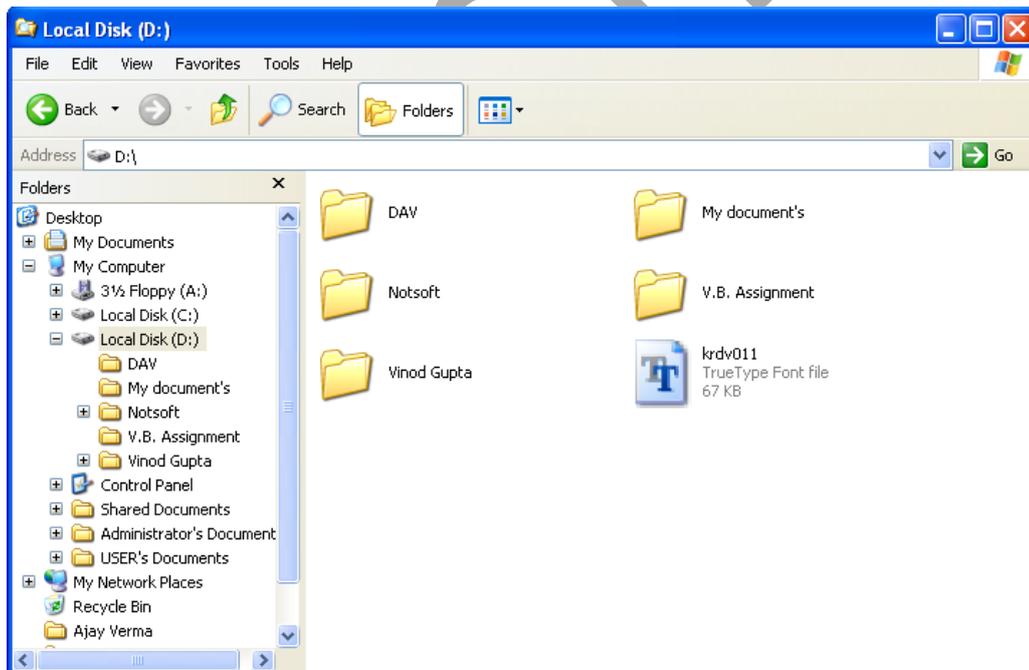
*To start Paint click at Start → Point to All Programs → Point to Accessories → and then click at Paint.*



### Windows Explorer:

Windows Explorer displays the hierarchical structure of files, folders, and drives on your computer. It also shows any network drives that have been mapped to drive letters on your computer. Using Windows Explorer, you can copy, move, rename, and search for files and folders. For example, you can open a folder that contains a file you want to copy or move, and then drag the file to another folder or drive.

- To open Windows Explorer, click Start, point to Programs, point to Accessories, and then click Windows Explorer. (or)
- Open any window through My Computer. Click on "View" menu, point to "Explorer Bar" and then point to "Folder".



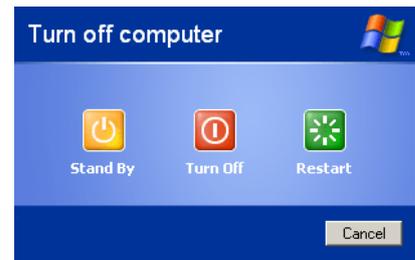
Window of Windows Explorer

We see the screen spitted into parts, left and right. In left part we see all the drives, folders and sub folders in tree structure where as in right part any drive, folder or sub folder can be seen in opened position. Cut, copy, paste or move actions can be performed easily as discussed before.

**Shutting Down the Computer:**

When we are finished with working on computer, we are ready to switch off our computer. But, we need to properly shutdown our computer. If we properly shut down our computer, our operating system firstly saves any Windows setting that we changed and writes any information that is currently stored in memory to our hard disk. This prepares our computer to be turned off safely.

*To shut down our computer click the start button and then click "Turn Off" Computer. The Turn Off computer Dialog box pops up. Click on Turn Off button (To restart the computer click on Restart button).*



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