

COMPUTER COURSE FOR DATABASE MANAGERS

ROORKEE

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(UNDER WORLD BANK AIDED HYDROLOGY PROJECT)

MODULE - 2

OPERATING SYSTEM

by

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OPERATING SYSTEM

1.0 INTRODUCTION

System software is a series of programs written to simplify the interface between the programmer and the computer hardware. System software is generally composed of an operating system (OS), language translators, utilities, data management and data communication systems. The OS which functions as an office manager for the computer system.

Overall purpose of the OS is to control the activities of the computer system. It serves as the traffic cop, directing and managing computer events. In addition, the OS provides a useful interface that allows the user to concentrate on what he wants to accomplish, rather than on the details of how the computer internally carries it out.

Three of the major functions of an OS are overall master control, resource management, and monitoring activities. The tremendous demand for computing power, the need for increased reliability, and the decreasing price of hardware have led to OS designed for use with computer systems that have multiple processors.

While there hasn't been any official committee that has specified industry parameters, several de facto standards for microcomputer OS have developed. A de facto standard is one that vendors informally accept, generally because it has come to dominate a market segment of the business. For the PCs, it is the DOS operating system. In some computers, OS is being implemented in firmware, as permanently coded instructions within a ROM. Other popular OS are Windows and OS/2.

A critical point to understand is that application programs or software packages such as payroll, word processing, and spreadsheet are designed for use with a specific OS. In turn, most OS are designed for use with a particular microprocessor. The general rule is that application software is not portable. That is, it cannot be used with just any computer system.

2.0 MS DOS

MS-DOS or the Micro Soft Disk Operating System consists of a group of programs which has the following functions :

- to monitor commands given by the user to the computer,
- to load and execute programs specified by the user,
- to manage the devices attached to the computer,
- to manage the files of data and programs that the computer will work with.

MS-DOS allows the user to enter the commands in upper case letters, lower case letters or a combination of both. All the DOS commands are terminated by [Enter] key. The important commands of DOS are described below :

2.1 ATTRIB Command

This command allows to set the read attributes of a file to read-only or to display the attributes of a file. The syntax is :

```
[path]ATTRIB [+/-R] [path]filename.ext
```

where

[path] before ATTRIB specifies the path of the ATTRIB command file.
[+/-R] is used to set the read attributes of the specified file and filename.ext specifies the file you want to mark as read-only.

2.2 BACKUP Command

This command backs up one or more files from a disk to another disk. The drive specifiers of the disks must be different. The syntax is :

```
[path]BACKUP d:[path]filename d: [/S][/M][/D:mm-dd-yy]
```

where

[path] before BACKUP specifies the path of the BACKUP command file.
d:[path]filename specifies the filenames to be backed up.(Source)
d: specifies the drive that will contain the backed up files.(Destination)
/S is used to backup all the files in all the subdirectories in addition to the files in the specified directory.
/M is used to backup files that have been modified since the last backup.
/D is used to back up files that have ben modified on or after the specified date. The format of the date spe4cified will be mm-dd-yy.

2.3 CD Command

This command changes the working directory. The syntax is :

```
CD <directory_name>
```

e.g.

```
CD \IRCC
```

will set working directory as \IRCC.

2.4 CHKDSK Command

It shows the space available on disk or floppy. The syntax is:

```
CHKDSK
```

2.5 CLS Command

This command clears the screen.

2.6 COPY Command

This command copies the contents of one file to the other file. The syntax is:

```
COPY <file_one> <file_two>
```

e.g.

```
COPY ABC.EXT XYZ.EXT
```

As a result of the above command there will be two files in the directory with same contents but with different names ABC.EXT and XYZ.EXT.

2.7 DATE Command

This command is used to change the date known to the DOS. The syntax is:

DATE [mm-dd-yy]

where

mm-dd-yy specifies the date in month-day-year format.

2.8 DEL or ERASE Command

It deletes selected files. The syntax is:

DEL <filename.ext>

or

ERASE <filename.ext>

e.g.

DEL RAJEN.BAK

will delete the file RAJEN.BAK from current directory.

2.9 DIR Command

It gives the information about the file like, file name, extension, size of the file in bytes and date and time the file was last edited. e.g.

DIR

will display all the file in current directory.

DIR/P

will display directory, pausing after every screenful to enable the user to examine the list.

2.10 MD Command

This command is used for creating a directory or subdirectory. The syntax is:

MD <Directory name>

e.g.

MD IRCC

will create a sub directory IRCC in the current directory.

2.11 PATH Command

This command searches specified directories for commands or batch files that were not found by a search of the current directory. The syntax is :

PATH [path1;path2.....]

A list of drives and path names, seperated by semicolons can be specified.

2.12 PRINT Command

This command prints a file. The syntax is :

```
PRINT <filename >
```

2.13 PROMPT Command

This command is used to set a new DOS prompt. The syntax is :

```
PROMPT [prompt text]
```

2.14 RD Command

This command is used for deleting a directory or sub directory. The syntax is:

```
RD <directory name>
```

For deleting a directory, it should not contain any file i.e. the directory should be empty.

2.15 RENAME Command

It changes the name of selected file. The syntax is:

```
RENAME <oldfile_name> <newfile_name>
```

e.g.

```
RENAME ABCD.FOR KKK.FOR
```

will rename the file ABCD.FOR to KKK.FOR.

2.16 RESTORE Command

This command restores one or more backup files from a disk to another disk. The syntax is :

```
[path]RESTORE d:[/S]
```

where

[path] is the path of the RESTORE command file.

d: is the drive that contains the backup files.

/S is used to restore all files in all the subdirectories in addition to the files in the specifies directory

2.17 SYS Command

This command transfers the operating system files from the first drive specified to the second drive specified. This syntax is :

```
[path]SYS d:
```

where

[path] before SYS specifies the path of the SYS command file and

[d:] specifies the disk drive where the operating system files are to be transferred

2.18 TIME Command

Whenever any file is created or modified, the time of creation/modification of that file is recorded in the system. This command permits to change the time known to the system. The syntax is :

TIME [hh:mm:ss]

Where,

hh specifies the hours
mm specifies the minutes and
ss specifies the seconds

2.19 TREE Command

This command displays all of the directory paths found on the specified drive., and optionally lists the files in each subdirectory. The syntax is :

[path]TREE d:[/F]

where,

[path] before TREE specifies the path of the tree command file
[d:] specifies the drive whose directory paths are to be displayed and
[/F] is optionally used to display the names of the files in the subdirectories.

2.20 TYPE Command

It displays the contents of an ASCII file on the screen. The syntax is :

TYPE <filename.ext>

e.g.

TYPE RAJEN.DAT

will display the contents of file RAJAN.DAT on screen.

2.21 Changing the Drive

To change the drive type the drive name followed by colon(:) sign (without any blank). e.g.

A:

The default drive will be A: now.

2.22 Halting the rushing text

When a program puts out many lines of data in rapid succession the user need a way to stop the flow of text so that it can be read before it rolls off the screen. Press [Ctrl] and [S] keys simultaneously for halting the flow of text. Press any key to restart the flow of text.

2.23 Copying file from one floppy to other floppy

When system contains only one floppy drive, floppy swapping is necessary, e.g. if a file is to be copied from 'X' floppy to 'Y' floppy, with floppy "X" is in drive A, type the following :

COPY A:<filename> B:

As a result the file <filename> will be copied from floppy X to floppy Y.

For copying the whole floppy, DISKCOPY command is used which also formats the target floppy. The syntax is:

DISKCOPY A: B:

It will format the target floppy and copy all the files from A drive to B drive.

2.24 Copying file from floppy to directory

Insert floppy in drive A and type

COPY A:<filename> c:<directory name>

e.g.

COPY A:*. * c: IRCC

will copy all the files of floppy to IRCC directory.

2.25 Shut Down Sequence

This sequence to shutdown the system is :

- First remove the floppy from floppy drive, if any .
- Switch off the printer.
- Switch off the C P U.
- Switch off the monitor.

3.0 MS WINDOW 3.1

3.1 Introduction

Windows is a GUI (Graphical User Interface) combined with support of standardized methods. Instead of being a full operating system, Microsoft had originally developed Windows as an add-on over MS-DOS. However, the Windows 95 has been developed as a full fledged OS.

3.1.1 What is WINDOWS?

Windows is an operating environment. It can be called User interface methodology where user need not concern himself with how windows work, because the goal of windows application developes is to use the windows environment with more visible continuity.

3.1.2 Why Use WINDOWS ?

Some reasons why windows is becoming popular around the world, are :

- It is an easy-to-use, consistent GUI for virtually all programs.
- It is capable of multitasking (running several programs simultaneously).
Graphics programs and character based programs can be run concurrently.
- Program Manager can be used to switch easily between multiple program.
- With windows user can communicate and exchange data between programs without transferring or copying files.
- As file and disk-mangement are simple and readily available, user don't have to close and open programs or use DOS commands to do standard file and disk- maintenance chores.
- Windows can run applications that offer high quality output.
- Many programs are included with windows, such as word processor and a drawing program.

3.1.3 Requirement to Run WINDOWS

Windows runs on two operating modes depending upon hardware configuration.

(i) For PC 386 enhanced mode :

A personal computer with a 386 processor or higher having :

- 640 K conventional memory
- 1024 K extended memory
- 8MB of free disk space 10 MB recommended
- One floppy disk drive

(ii) For Standard mode :

A personal computer with a 286 processor or higher or 386 that has less than 2MB of free Memory having :

- 640 K of conventional memory
- 256 K of extended memory
- 6 MB of free disk space

- one floppy disk drive
- A display adapter that is supported by windows
- A printer that is supported by windows
- A mouse that is supported by windows
- Modem if terminal is to be used for windows application.

3.1.4 Running Programs Simultaneously

Depending on available hardware, doing several tasks simultaneously is made easy through windows. For example when the user switches from painting program to word processor he has to exit the painting program go to MS-DOS and then start the word processor. Leaving programs can be slow starting programs usually is even slower. With windows switching between programs is less than a second.

3.1.5 Communication Among WINDOWS Programs

Two major methods for passing information are clipboard and OLE (Object Linking and Embedding). Most of interprogram communication is done through the clipboard.

(i) Clipboard

Clipboard is a buffer or holding area in system memory that contains one piece of data at any one time. Read and write is done through standard commands.

(ii) OLE (Object Linking & Embedding)

OLE is a method for passing data directly between programs without having to use the clipboard. It can be thought of a telephone network on which one program can dial another program and pass on certain types of information.

3.1.6 Starting and Leaving Windows :

(i) Starting windows :

Starting windows with WIN command from MS-DOS prompt

```
C>WIN
```

It automatically runs Program Manager

(ii) Running programs as you start windows :

If user knows the name of program on MS-DOS command line, WINDOW starts that program rather than Program Manager

C : >WINWORD5\WORD

It starts the word program as it is in WORD5 directory.

(iii) Leaving Windows :

As windows is an operating environment, not a single program it requires a separate operating system (DOS).

- When user exits from other window programs it returns to program Manager. When program manager is in front window, give the Exit Command in the file menu or press Alt-F4.
- When user closes Program Manager he is presented with a dialog box Press OK to leave windows to resume working in windows press Cancel or Esc key.

3.1.7 Menus and Commands :

The most common way to tell windows what user wants to do is by choosing a command from a menu. Every window program has atleast one menu and most have four or more. The menu bar is at the top of the program window. the Program Manager menu bar has the following pull down menus :

- File
- Options
- Window
- Help

Elipses and Check Marks

In some commands, an elipses (_ _ _) follows the command name. In file menu the commands such as **N**ew, **M**ove, **C**opy etc. have elipses but others like **O**pen and **D**ele~~t~~e do not.

An elipses indicates that the command does not execute directly. Instead the command issued displays a dialog box from which you can make additional choices before the command executes.

Sometimes commands have a check mark to their left. The check mark indicates that the particular maked command is currently active or selected. The check

mark is absent when the command is unselected or when it is inactive. Check marks are ON/OFF indicators and sometimes called toggles.

3.2 Main Window Manager Programs :

3.2.1 Program Manager

- Program Manager organises user programs into groups.
- The central program from which user can run other programs is the window Program Manager.
- User see this program running when he first starts windows and again when he is about to leave windows.
- Its features is its flexibility.

When window starts it looks like as in Fig.1

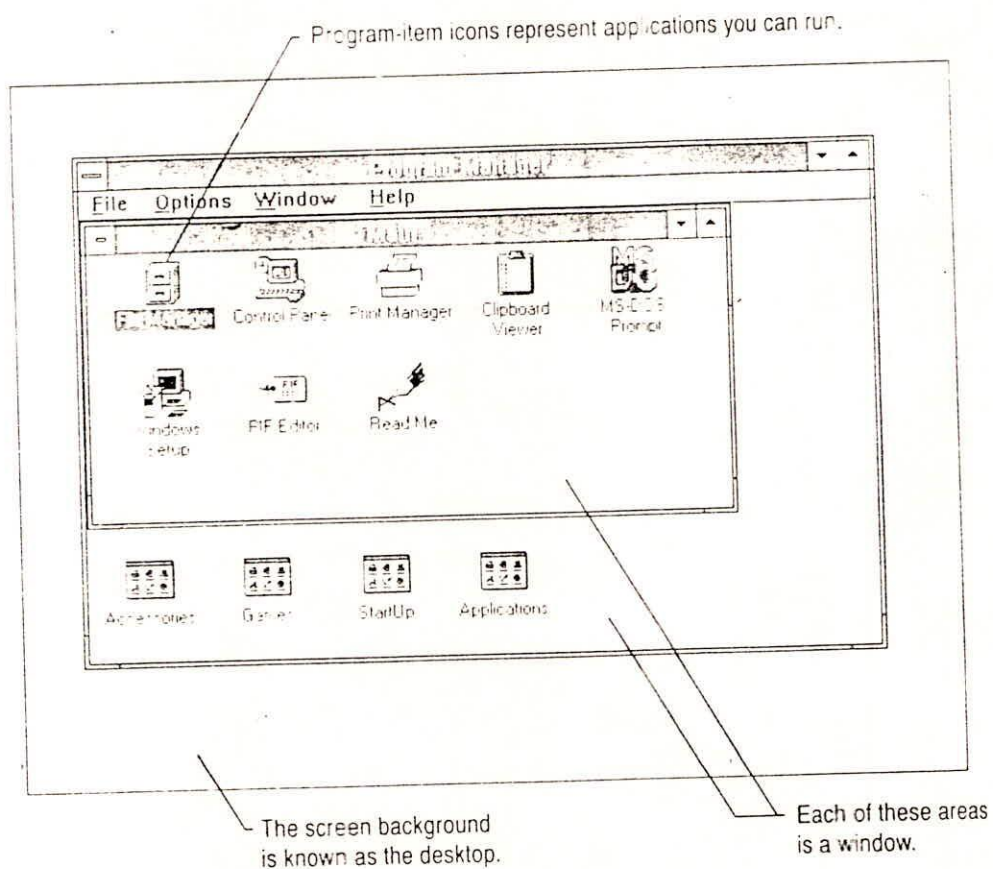


Fig.1 PROGRAM MANAGER

- (1V) **H**elp
- C**ontents
- S**earch for Help on _ _ _
- H**ow to use Help
- W**indow tutorial
- A**bout Program Manager_ _ _

Fig.5. Help Menu of Program Manager.

Table - 4

Command	Function
C ontents	Displays a table of topics covered in Help
S earch for Help on	Shows a detailed alphabetical list of topics in Help from which user can choose.
H ow to use Help	Provides tips and techniques to use Help.
W indow tutorials	Lessons to know window basics.
A bout program Manager	Information about users copy of Program Manager, its operating mode memory capacity and available system resources.

3.2.2 File Manager

- File manager can be started from Program Manager by double clicking its icon in the Main group window.
- File manager provides a graphical representation of files and directories and help the user to organize and simplify file maintenance.
- The directory window is divided by the split bar. The left side of the window displays the structure of the current drive, or the directory tree. The right side of the window displays a list of files in the selected directory as seen in Fig.6.
- User can use the drive icons on the drive bar to choose what drive is displayed in a directory window.

- Status bar displays information about the current drive and directory and other information that helps explain the task user is performing with File Manager.
- The Menu bar contains menus listing File Manager Commands.

Tasks performed by File Manager

- View the contents of directories.
- Move, copy and delete files and directories.
- Change to other disk drives, including network drives.
- Format and maintain disks.
- Print Documents.
- Start Application.
- Rename and delete files.
- Change the kind and amount of information displayed about each file.
- Create directories and subdirectories.
- Searching for files.

3.2.3 Print Manager

Print Manager is an application included with Windows that user can use to manage documents sent to a printer and can install and configure printers, as shown in Fig.7.

Whenever user print from a window based application, the application creates a print file and sends it to Print Manager. Print Manager works in background, sending users documents to the printer while he can continue working.

User can check the status of the document at any time and change its status until it starts printing.

As user sends documents to Print Manager, a print queue forms. The print queue displays the following printer information :

- The name of the printer.
- The port printer is connected to and, if it is a network printer, the network path.
- The current status of the printer (such as native or idle).
- Beneath the printer information, the print queue displays the following document

information.

- The title of the document.
- The document's position in the queue, or a printer icon if the document is printing.
- The size of the document in kilobytes (if the Print file size command has a check mark next to it).
- The time and date user sent the document to Print Manager.
- If a document is currently printing, the amount (as a percentage) of the document printed so far.

To Pause printing

- In print Manager window, select the name of the printer user want to pause.
- Choose the Pause button, Or press ALT + P.

To Resume printing

- In print Manager window, select the document or the name of the printer you want to resume printing.
- Choose the Resume button. Or press ALT + R.

To Cancel printing

- In print manager, select the document user wants to cancel.
- Choose the Delete button. Or press ALT + D. A dialog box appears, prompting to confirm the deletion.

3.3 Other Programs That Come with Windows

- **Write**, a word processor that can prepare letters reports and articles.
- **Paintbrush**, a painting program that can create colour or black & white drawings.
- **Calendar**, an appointment calendar that helps you organize user time and alerts when important events are planned.
- **Cardfile**, an organizational program user can use to keep and search for information.
- **Terminal**, a communications program for connecting your PC to other computers through a modem.
- **Calculator**, a desk calculator that can replace that old pocket model.

3.4 Keyboard Shortcuts

User can use keyboard shortcuts to do common Window tasks.

3.41 Using Help

To	Press
- Start Help	F1
- Move among jumps in a topic	TAB or SHIFT + TAB
- Display all the jumps in a topic or cancel the selection of a jump	CTRL + TAB
- Copy a Help screen or annotation into the clipboard	ALT + PRINT SCREEN
- Quit Help	ALT + F4

3.4.2 Switching between Applications

To switch	Do this
- Between applications	Press and hold down ALT or SHIFT + ALT and repeatedly press TAB
- To the next application	Press ALT + ESC
- To the previous application	Press SHIFT + ALT + ESC
- To task list	Press CTRL + ESC
- An MS-DOS based application from a full screen to a window and back	Press ALT + ENTER

3.4.3 Using Menus

To	Press
- Activate the menu bar	ALT or F10
- Select a menu	ALT + the underlined character in the menu name
- Choose a menu command	An arrow key, ENTER or the underlined character in the command name.
- Open the control menu for an application window	ALT + SPACE BAR
- Open the Control menu for a document window and a group window.	ALT + HYPHEN

3.4.4 Moving Around

To move	Press
---------	-------

- Between menu commands, characters in a text box, or items in a list.
- To next or previous dialog box item
- To a dialog box item
- Right or Left one word in a text box
- To beginning or end of a line, list, or screen
- Up or Down one screen

An arrow key

TAB or SHIFT + TAB

ALT + the character underlined in the item name.

CTRL + an ARROW key.

HOME or END

PAGE UP or PAGE DOWN

3.4.5 Selecting Items

* In a Document Window

To select

- One line of text up or down
- Text to the beginning or end of a SHIFT document

Press

SHIFT + UP ARROW or

SHIFT + DOWN ARROW

SHIFT + CTRL + HOME or
+ CTRL + END

* In a Document Window, Text Box, or List

To Select

- Text to the beginning or end of a line
- The next or previous word
- One letter at a time to left or right

Press

SHIFT+HOME or SHIFT+END

SHIFT + CTRL + RIGHT Arrow
or SHIFT + CTRL + LEFT Arrow

SHIFT + LEFT Arrow or

SHIFT + RIGHT Arrow

* In a Dialog Box

To Select

- Select nonconsecutive items in a list
- Select a list item or check box
- Select all items in a list
- Cancel all selections in a list except the current one

Press

SHIFT + F8, Use arrow key to move item to be selected, press SPACEBAR to select item, press SHIFT + F8 again.

SPACEBAR

CTRL + SLASH (/)

CTRL + BACKSLASH (\)

3.4.6 Editing Text

In a Text Box or Window

To	Press
- Delete the character to the left or right or delete selected text.	BACKSPACE or DEL
- Copy selected text into the clipboard	CTRL+ C or CTRL + INS
- Move selected text into the clipboard	CTRL + X or SHIFT + DEL
- Paste text from the clipboard	CTRL + V or SHIFT + INS
- Undo the last editing action	CTRL + Z or ALT+BACKSPACE

3.4.7 Copying onto the Clipboard

To	Do this
- Copy an image of the entire screen onto the clipboard.	Press PRINT SCREEN
- Copy an image of the active window on to the clipboard.	Press ALT + PRINT SCREEN

3.4.8 Quitting an Application & Closing a Window

To	Press
- Quit an application	ALT + F4
- Close the active document window or group window.	CTRL + F4

3.4.9 Program Manager

To	Press
- Move between groups	CTRL + F6 or CTRL + TAB
- Move between items in a group window	An arrow key
- Start the selected application or restore the selected group icon.	ENTER
- Tile the group windows	SHIFT + F4
- Cascade the group windows	SHIFT + F5
- Close an active group window	CTRL + F4

3.4.10 File Manager

To	Do this
- Move among the left and right side of the directory window and the drive bar.	Press TAB or F6
- Change the drive displayed in the	Press CTRL + the letter representing directory window.

- Display or hide a selected directory's subdirectories, start a selected application, or open a selected file. Press ENTER
- Open a new window, display only the contents of the selected directory. Press SHIFT + ENTER
- Select the next file or directory whose name begins with a certain character. Press the first character or file or directory name. Press F7.
- Move the selected file or directory. Press F8
- Copy the selected file or directory. Press F5
- Update the information displayed. Press ALT + ENTER
- Display the properties of the selected file or directory.

3.4.11 Print Manager

- | To | Press |
|--|---|
| - Move between queues and between documents in each queue. | Up Arrow or Down Arrow |
| - Move the selected document up or down in a queue. | CTRL + UP ARROW or
CTRL + DOWN ARROW |
| - Update the information displayed | Press F5 |

3.4.12 Write

- | To | Do this |
|---|-----------------------------|
| - Undo the last typing or editing action | Press C+Z or ALT+BACKSPACE |
| - Insert a manual page break | Press CTRL + ENTER |
| - Insert an invisible hyphen (only to be used when a word is wrapped). | Press CTRL + SHIFT + HYPHEN |
| - Switch between the document and Find or Replace dialog box or between the Header and Footer window and the Page Header or Page Footer dialog box. | Press ALT + F6 |

4.0 WINDOW-95

4.1 Introduction

Window 95 is an operating system it bypasses DOS and runs completely in protected mode. It can however stop briefly in real mode at start up to process the

now-optional CONFIG.SYS and AUTOExEe.BAT, to load TSRs and old device drivers. With Window 95 INI files will be a history, crucial configuration details like user preferences, hardware settings and security are stored in the Registry - a database user can distribute across a Window 95 network. The OS also expands and contracts its cache buffer space to match available memory - thus ending swap-file tinkering and cache memory problems. Window 95 is 32 bit but microsoft has left some 16-bit code in so that it can run on 4MB systems.

4.1.1 What's on Window 95 screen

Depending upon how computer is set up, various items appear on desktop. Whenever Window is started.

- My Computer

By double clicking this icon computer contents can be seen and files can be managed.

- Network Neighbourhood

By Double clicking this icon user can see available resources on the network, if the computer is connected to any of the network.

- Recycle Bin

The Recycle Bin is a temporary storage place for deleted files. User can use it to retrieve files deleted in error.

- Start button

User can click start button on the task bar to start a program, open a document, change system settings, get Help, find items on Computer.

4.1.2 What's new in Window 95 ?

Window 95 offers many new exciting features. Some of the features are :

o New improved interface

Window now features the start button and taskbar.

Start button : It quickly opens programs, find documents, and use system tools.

Task bar : It is used to switch between programs as easily as changing channels on T.V.

- **Windows Explorer :**

Windows Explorer is a powerful way to browse through and manage files, drivers and network connections.

- **Long filenames :**

Windows now supports long filenames to make files easier to organise and find.

- **Improved game & multimedia support :**

Faster video capability for games, enhanced support for MS-DOS based games, and improved performance for playing video and sound files.

- **Plug and Play hardware compatibility :**

User can just insert the card for Plug and play Hardware in Computer. When user turns on the computer window recognizes and sets up hardware automatically.

- **32-bit preemptive multitasking :**

Window provides using many programs at once : do more in less time.

- **Microsoft Exchange :**

It is used to view and work with all types of electronic communications, including e-mail and faxes.

- **The Microsoft Network :**

User can use online service to communicate with people worldwide, using e-mail, bulletin boards and the Internet.

4.2 Getting Started with WINDOW 95

4.2.1 Logging on to Windows

- In the User Name box, type your name.
- In the Password box, type a password. The first time, Windows prompts user to confirm his password.

4.2.2 The Start button and taskbar

The start button and taskbar are located at the bottom of screen when Window starts for the first time. By default they are always visible when Window is running.

Starting with the Start Menu

When user clicks on Start button a Menu comes which contain everything that is needed to begin using Windows as seen in Fig.8.

<u>This Command</u>	<u>Do this</u>
Programs	Displays a list of programs to start.
Documents	Displays a list of documents opened previously.
Settings	Displays a list of system components for which settings can be changed.
Find	Enables to find a folder, file, shared computer, or mail message.
Help	Starts Help. User can use help contents, Index, or other tabs to find out how to do a task in Windows.
Run	Starts a program or opens a folder when user type an MS-DOS command.
Shut down	Shuts down or restarts computer, or logs off.

Depending on Computer and the options user have chosen, user may see additional items on his menu.

To start a Program

- (i) Click the start button and then point to Programs.
- (ii) Point to the folder such as Accessories that contains the program, and then click the program.

Opening a Document

There are several methods to open document in Windows. Two methods are described below :

A.To open document from within program :

- (i) On the file menu, click open.
- (ii) To open a document in different folder, click the arrow next to the look in box, and then click the disk that contains the folder.
- (iii) Click the folder that contains the document to be open and then click open.
Scroll to see more folders.
- (iv) Click the document to open, and then click open.

B.To open a Document by using the Documents menu :

- (i) Click the start button, and then point to Documents/
- (ii) Click lthe name of document to be open.

Changing System Settings :

Using Control Panel, user can change the way Window looks and works.

- (i) Click the start button and the Point to Settings.
- (ii) Click Control panel.
- (iii)Double-click an icon to see the settings user can change.

Finding Something on Computer :

When the user doesn't know where a document or folder is he can use find command to find and open it.

- (i) Click the start button and then point to Find.
- (ii) Click files or Folders.
- (iii)Click the Named box, and then type the name of the file or folder which is to be found.
- (iv) To specify where to search, click the arrow next to the look In box, or click Browse.
- (v) To start the search, click Find Now.

Getting Help :

On line help is essential for learning and using Windows. There are two kinds of Help : Help about a specific procedure and Help that gives information about what is on the screen.

A.To find Help through the contents :

- Click the contents tab to find topics grouped by subject, and then follow the instruction on screen.
- To return to the list of topics, click Help Topics.

B.To find Help through the Index :

- Click the Index tab to find topics listed alphabetically and then follow the instructions on screen.
- To return to the list of topics, click Help topics.

C.To find Help topics containing a word or phrase :

- Click the Find tab to find all topics that contain a specific word or phrase, and then follow instructions on screen.

D.To get Help on a specific Item :

- For information about an item in a dialog box, click ? and then click the item.
- A pop-up explanation appears. Click it to make it disappear.

Starting a Program by Using the Run Command :

When the user knows the path of the program he wants to start, he can use run command to start it easily.

- Click the Start button and then click Run.
- Type the name of the program, folder, or document user want to open. Or click Browse to look for the item.

Shutting Down Computer :

To avoid damaging files, always shut down Windows before turning off Computer.

- Click the start button, and then click shut down.
- Click Yes. If the document has not been saved when Window prompts to save changes.
- A screen message lets user know when he can safely turn off his Computer.

The Taskbar :

Evertime user starts a program or open a Window, a button representing that window appears on the taskbar. To switch between windows, just click the button for the window that is required. While closing a window its button disappears from the task bar.

Depending on what task user is working on, other indicators can appear in the notification area on the task bar, such as printer representing print job or a battery representing power on portable computer. At one end of the taskbar is the clock. To view or change settings, just double click the clock or any of the indicators.

4.3 Organizing Files and Folders :

4.3.1 To move or Copy a file or folder

- Double click "My Computer", Find the file or folder user want to move or copy, and then click it.
- Click Edit
 - To move the file, click cut.
 - To make a copy of the file, click copy.
- Open the folder where user want to place the file, click Edit, and the click Paste.

4.3.2 To delete a file or folder :

- Double-click My Computer. Find the file or folder uder want to delete, and then click it.
- On the File menu, click Delete.

4.3.3 To create a new folder :

- Double click My Computer, and then double-click the disk drive or folder in which user want to place the new folder.
- On the File menu, point to New, and then click Folder.
- Type the name of the new folder and then press ENTER.

4.3.4 To copy a file to a floppy disk :

- Double-click My Computer. Find the file or folder user want to copy and then click it.
- On the File Menu, point to Send To, and then click the drive where user want to copy the file or folder.

4.4 Printing

4.4.1 Setting up printer for use with Windows

- Click the start button, point to settings, and then click Printers.
- Double-click Add Printer.

- Follow instructions on Screen.
- As it is completed icon for printer appears in the Printers folder & printer is ready for use.

4.4.2 Printing a Document

- If the document is open, click File and then click Print.
- Double-click the printer icon in the printer folder to see the documents that are printing or waiting to print, and to manage printing. User can pause or cancel the printing of one or more documents.

4.5 Shortcut Keys

You can use the following keyboard shortcuts with Windows.

<u>To</u>	<u>Press</u>
See Help on the selected dialog box item	F1
Quit a program	ALT+F4
View the shortcut menu for the selected item	SHIFT+F10
Display the Start menu	CTRL+ESC
Switch to the window you last/next window	ALT+TAB
Cut	CTRL+X
Copy	CTRL+C
Paste	CTRL+V
Delete	DEL
Undo	CTRL+Z

4.5.1 For the Desktop, My Computer, and Windows Explorer

When an item is selected, you can use the following shortcut keys :

<u>To</u>	<u>Press</u>
Rename an item	F2
Find a folder or file	F3
Delete immediately	SHIFT + DEL
View item properties	ALT+ENTER or ALT+double-click
Copy a file	CTRL key while dragging the file
Create a shortcut	CTRL+SHIFT while dragging the file

4.5.2 For My Computer and Windows Explorer

<u>To</u>	<u>Press</u>
Select all	CTRL+A
Refresh a window	F5
View the folder one level up	BACKSPACE

Close the selected folder and all its parent folders	SHIFT while clicking the Close button
Switch between left and right panes	F6

4.5.3 For Windows Explorer only

<u>To</u>	<u>Press</u>
Go to	CTRL+G
Switch between left and right panes	F6
Expand all subfolders under the	NUMLOCK+ASTERISK (*) sign
Expand the selected folder	NUMLOCK+PLUS (+) sign
Collapse the selected folder	NUMLOCK+MINUS(-) sign
Expand current selection if it's collapsed, otherwise select first subfolder	RIGHT Arrow
Collapse current selection if it's expanded, otherwise select parent folder	LEFT Arrow

4.5.4 For Properties Dialog Boxes

<u>To</u>	<u>Press</u>
Move forward through options	TAB
Move backward through options	SHIFT+TAB
Move forward through tabs	CTRL+TAB
Move backward through tabs	CTRL+SHIFT+TAB

4.5.5 For Open and Save As dialog boxes

<u>To</u>	<u>Press</u>
Open the Save In or Look In list	F4
Refresh	F5
Open the folder one level up, if a folder is selected	BACKSPACE

4.5.6 Accessibility Options shortcut keys

To use Accessibility Options shortcut keys, the shortcut keys must be enabled. For more information, look up "Accessibility, shortcut keys" in the Help Index.

<u>To</u>	<u>Press</u>
Toggle StickyKeys on and off	SHIFT 5 times
Toggle FilterKeys on and off	RIGHT SHIFT for 8 seconds

Toggle ToiggleKeys on and off
 Toggle MouseKeys on and off
 Toggle High Contrast on and off

NUMLOCK for 5 seconds
 LEFT ALT+LEFT SHIFT +NUMLOCK
 LEFT ALT+LEFT SHIFT+PRINT
 SCREEN

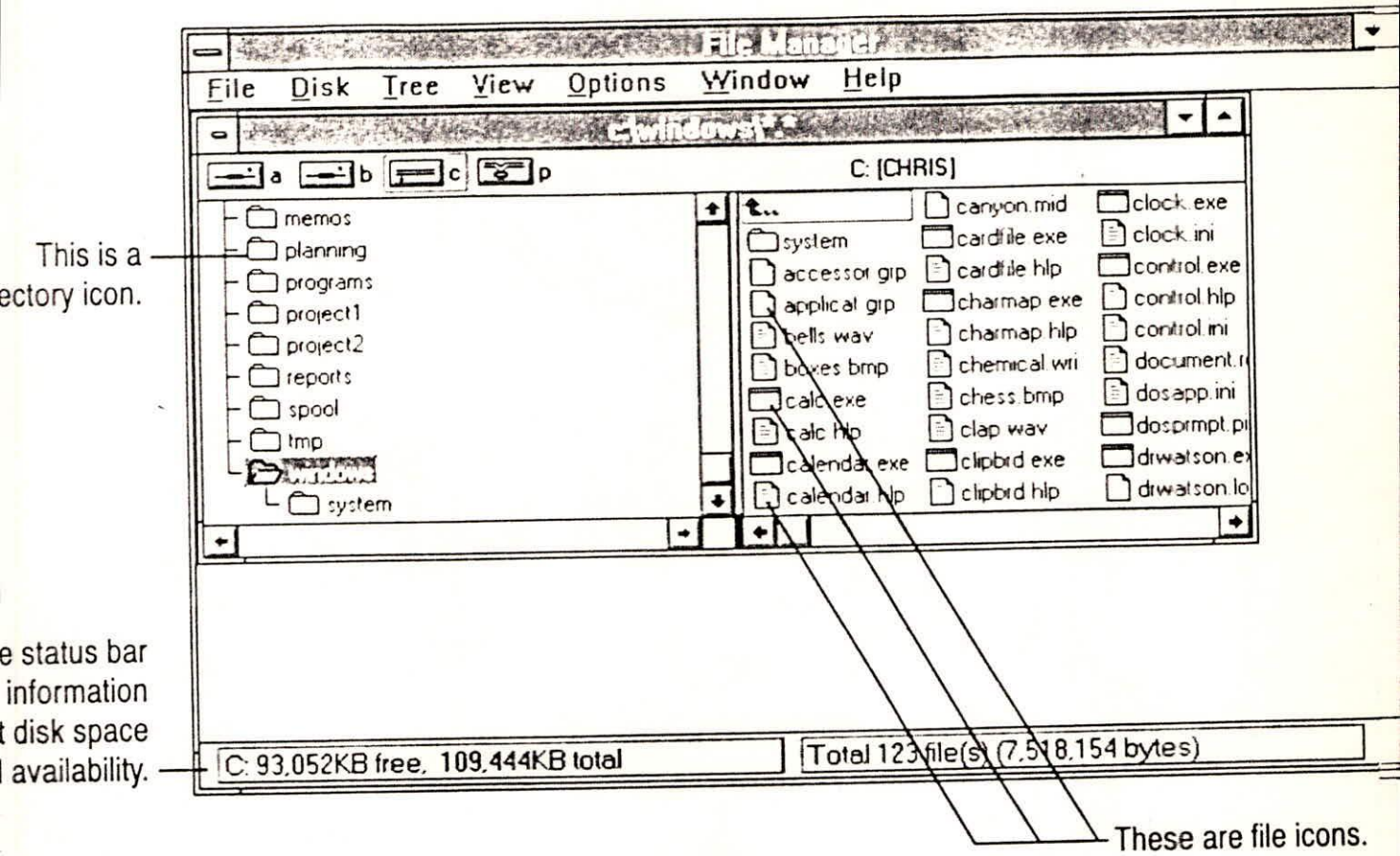


Fig.6 FILE MANAGER

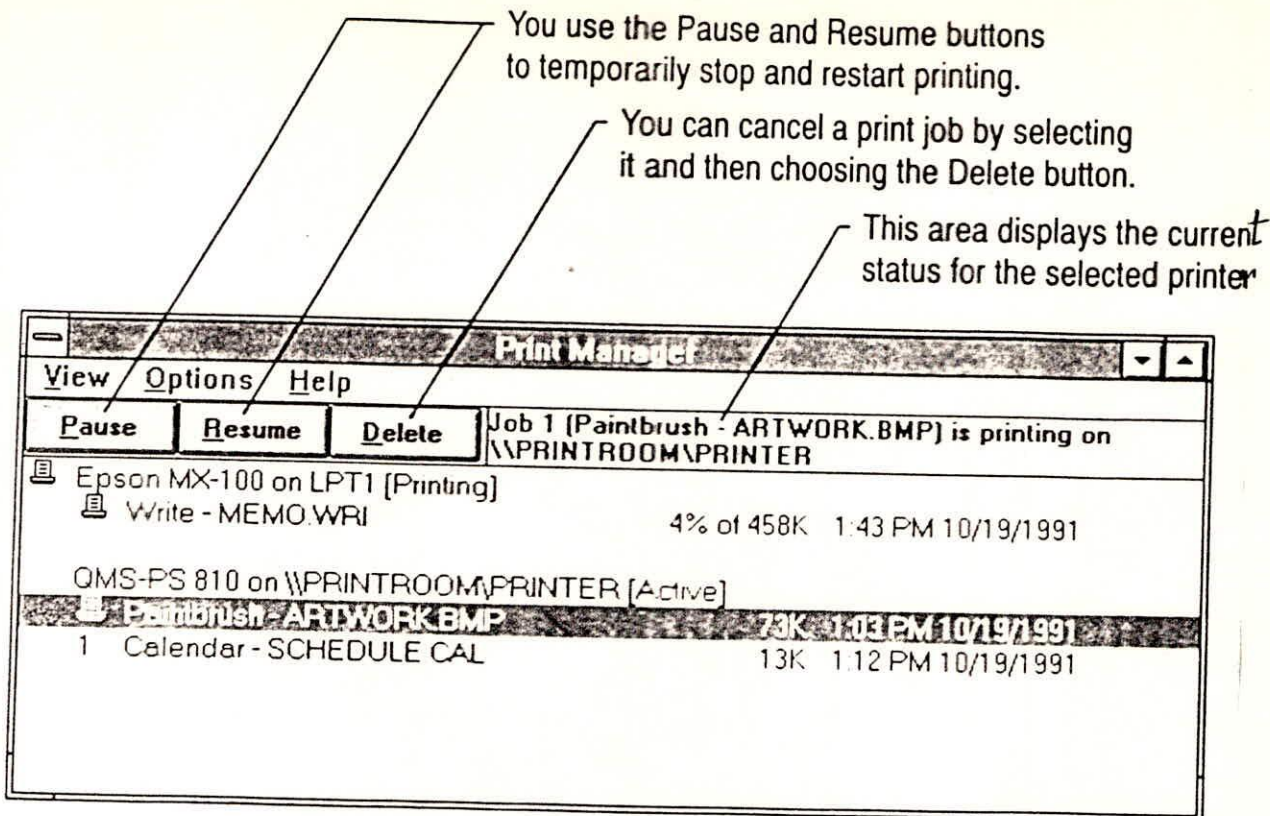


Fig. 7 PRINT MANAGER

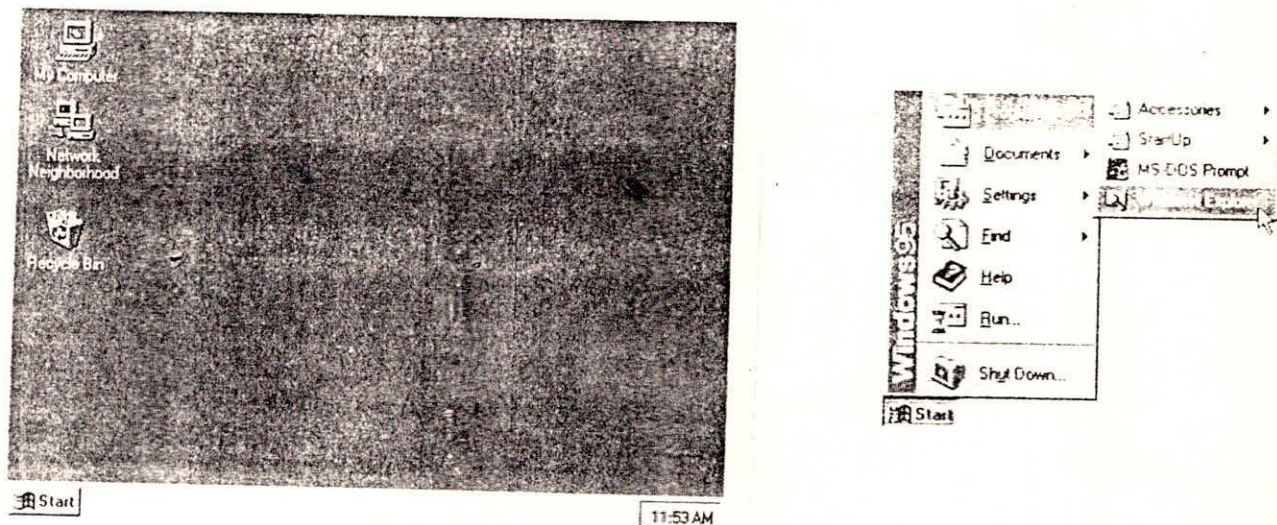


Fig. 8 WINDOW 95 SCREEN