Chapter- 5: Different commands in Disk Operating System

5.1 Introduction:

DOS (Disk Operating System) was the first widely-installed operating system for personal computers. (Earlier, the same name had been used for an IBM operating system for a line of business computers.) The first personal computer version of DOS, called PC-DOS, was developed for IBM by Bill Gates and his new Microsoft Corporation. He retained the rights to market a Microsoft version, called MS-DOS. PC-DOS and MS-DOS are almost identical and most users have referred to either of them as just "DOS." DOS was (and still is) a non-graphical line-oriented command- or menu-driven operating system, with a relatively simple interface but not overly "friendly" user interface. Its prompt to enter a command looks like this:

```
C:\>_
```

The first Microsoft Windows operating system was really an application that ran on top of the MS-DOS operating system. Today, Windows operating systems continue to support DOS (or a DOS-like user interface) for special purposes by emulating the operating system.

In the 1970s before the personal computer was invented, IBM had a different and unrelated DOS (Disk Operating System) that ran on smaller business computers. It was replaced by IBM's VSE (Virtual Storage Extended) operating system.

5.2 Commands of Disk Operating System (DOS):

i) Directory or DIR command:

DIR command is an internal command which is used to display the contents in disk directory. To locate data files and programs on a specific disk, DOS uses the directory along with a file allocation table.

       C:\>DIR
This command will display the disk directory in the default drive.
       C:\>DIR/W
This command will display the disk directory in the default drive in a wide format.
       C:\>DIR/P
This command will display the disk directory in the default drive but page wise. This command is useful when the disk contains numerous files.
       C:\>DIR A:

This command will display the disk contents in A drive.

C:\\>DIR *.C

This command will display the disk contents in the default drive with only the files having the extension .C.   Here * is known as wild card character. It means all matching characters are represented by *.

ii) Clear or CLS command:

CLS command is used to clear the screen. When this command is entered, all the previously displayed text or messages are removed from the screen. The syntax is:

C:\\>CLS

iii) RENAME or REN command:

REN or RENAME command is used to rename an existing file. Consider the following example to rename a file in the current directory.

C:\\>REN A.BAK A.C
Or
C:\\>RENAME A.BAK A.C

When this command is entered, the file A.BAK is renamed as A.C.

iv) Delete or DEL command:

DEL command is used to delete files in a directory. Consider the following example to delete files in the current directory.

C:\\>DEL A.BAK

This command will delete all the files in the directory . The message "Bad command or file name" is displayed when the file is not as available in the directory.

C:\\>DEL *.BAK

This command will delete all the files in the directory with the extension .BAK The message "Bad command or file name" is displayed when the file is not as available in the directory.

C:\\>DEL *.*

This command will delete all the files in the directory. When this command used,the message "Are you sure to delete all files(y/n)?" is displayed. Press y to confirm deletion.

v) ERASE command:

ERASE command is used to erase or remove files in the directory. Consider the following examples to erase files in the directory.

C:\\> ERASE A.BAK

This command will erase the file A.BAK in the directory. The message "Bad command or file name" is displayed when the file is not as available in the directory.

C:>\\ ERASE *.*

This command will erase all the files in the directory. When this command is entered, the message "Are you sure to delete all files(y/n)?", is displayed. Press y to confirm deletion.

vi) DATE command:

DATE command is used to display the current system date. The computer also maintains a calendar. This command will display the current system date in
mm-dd-yy(month-date-year) format and the user may enter the new date. Consider the following example to display the current date.

C:\>DATE
Current date is Sun 09-25-2005
Enter new date (mm-dd-yy):

vii) TIME command:

TIME command is used to display the current system time. The computer also maintains a clock. This command will display the current system time in (hours:minutes: seconds) format and the user enter the new time. Consider the following example to display the current time.

C:\> TIME
Current time is 11:37:25.34p
Enter new time:

viii) Change directory or CD command:

CD (change Directory) command is used to change the directory to another specified directory/location in the disk. A message "Invalid directory" is displayed if the directory mentioned is not available. Consider the following example

(i)   C:\>CD ABC
This command will change the current directory to the specified directory ABC in the disk. Now the prompt is displayed as follows.
(ii)   C:\>CD FC
      C:\TC>CD ABCP
These commands will change the current directory to the specified directory TC and then to the directory ABCP in the disk. Now the prompt is displayed as follows.
      C:\TC\ABCP>
      C:\>CD\TC\ABCP
This command will also change the directory to the specified directory TC and then to the directory ABCP in the disk. Now the prompt is displayed as follows.
      C:\TC\ABCP>
CD command can be used in the following ways to quit from a directory or transfer the control to a root directory
      C:\TC\ABCP>CD
      C:\TC>CD..
      C:\>

ix) Make Directory or MD command:
MD (Make directory) command is used to create a new directory in the storage device to store programs. Consider the following example to create a new directory:

C:\>MD ABCP

This command will create a new directory in the current directory. To transfer the control to the new directory a CD command is used.

C:\>CD ABCP
CD:\ABCP>

x) Remove directory or RD Command:

RD (Remove Directory) command is used to remove a directory permanently from the disk. Note that all the files in that directory should be removed before the RD command is used. Also know that you should quit from the directory being removed. Consider the following example:

C:\TC RD ABCP
C:\TC\ABCP>DEL *.*

All files in directory will be deleted!
Are you sure(y/n)? Press y to confirm the delete option.

C:\TC\ABCP>CD..
C:\TC>RD ABCP

One of these commands can be used to remove the directory ABCP from the disk.

xi) COPY command:

COPY command is used to copy a file to a new location or directory in the disk. A file cannot be copied to itself in the same directory in the same name.
Consider the following example:

C:\>COPY AB.TXT AB.BAK

This command will copy the file AB.TXT in the same directory as AB.BAK. The first file name in the command AB.TXT is the source file and the file AB.BAK is the target file which is a copy of AB.TXT.

C:\>COPY AB.TXT A:

This command will copy the file AB.TXT from the C drive to A drive and is copied in the same name.

C:\>COPY AB.TXT A: AB.BAK

This command will copy the file AB.TXT from the C: drive to A: drive but the target file is named as AB.BAK.

C:\>COPY *.* A:

This command will copy all the files in the current directory of C: drive to A: drive in the respective file names

C:\>COPY *.* A:

This command will copy all the C program files in the current directory of C: drive to A: drive in the respective file names.
The COPY command can also be used to create a file in the console using the keyword CON along with COPY command.

C:\>COPY CON sample.txt

xii) TYPE command:
This command is used to display the contents of a file on the monitor screen.
Consider the following example

C:\>TYPE AB.TXT
This command will display the contents of the file AB.TXT on the screen.
TYPE command can also be used to send the contents of the file to the printer in the console using the keyword PRN.
Consider the following example

C:\>TYPE AB.TXT >PRN
This command will print the contents of the file AB.TXT

xiii) FORMAT command:

FORMAT command is used to format a new disk. It is an utility program that is available on hard disk. Only the formatted disks can be used by the operating system to store files or programs. Consider the following example to format a new floppy disk. Insert the new floppy disk in A drive and give the following command.

C:\>FORMAT A:
Nowadays new formatted floppies are available in packs which need not be formatted again. If any old floppy is formatted then the contents will be erased automatically.

xiv) DISKCOPY Command:

DISKCOPY command is used to copy all the contents of various directories of a disk in another disk. It is faster and useful to take backup copies.
Consider the following example:

C:\>DISKCOPY A: C:
Now the contents of floppy disk in A drive is copied to the hard disk drive C.

xv) Check disk or CHKDSK command:

CHKDSK command is used to get the report about a disk such as disk directories, files, storage space available etc. Consider the following example to check the floppy disk in drive A

C:\>CHKDSK A:
Now the details of floppy disk in A drive is displayed. It is also possible to display details using the SCANDISK command.