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Many teachers know that they have to use the DOS to start their IBM software but they do not know much about the disk operating system itself. In this article, I would like to share with you on how you could format new diskettes, create, save, load and copy files and eventually learn about the files in the directory. It is advisable to use this article with the computer in front of you as you are expected to perform certain tasks as we proceed.

1. What is DOS?

DOS is a collection of programmes designed to help you to create and manage files, run programmes, and use the system devices attached to your computer.

2. What is a PC DOS?

It is a Disk Operating System for the IBM Personal Computer.

3. What is MS DOS?

MS DOS stands for Microsoft(R) MS(tm)-DOS. It is a disk operating system for 8086/8088-based computers. Most IBM compatible personal computers run on this system.

4. What happens when you first load DOS?

    i) Insert DOS into drive A.
    ii) Switch on the computer.

Once DOS has been loaded, the system searches the DOS disk for the COMMAND, COM file and loads it into memory.

    iii) Enter the date
         mm (representing month) is a one- or two-digit number from 1-12
dd (representing day of month) is a one- or two-digit number from 1-12

yy (representing year) is a two-digit number from 80-90 or a four-digit number from 1980-2099.

Note: if you do not enter the date, the computer would use the default date e.g. 1-1-80 or 1/1/80

iv) Enter current time

hh (representing hour) is a one-two-digit number from 0-23

mm (representing minutes) is a one-two-digit number from 0-59

DOS uses this time value to keep track of when you last updated and/or created files on the system. Notice that DOS uses military time for instance, 1:30 p.m. is written 13:30.

HELP
If you make a mistake while typing, press the Control key on your keyboard, hold it down, and then press the C key. This (CONTROL-C) function will abort your current entry. You can then re-answer the prompt or type another command. To correct a line before you press (RETURN), use the (BACKSPACE) key to erase one letter at a time.

5. What are “Show Directory” commands?
Type the following commands, press (Return) and see what happens.

<table>
<thead>
<tr>
<th>Command</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>A)DIR</td>
<td>* list all files in default drive</td>
</tr>
<tr>
<td></td>
<td>– to stop listing, press the Control key on your keyboard, hold</td>
</tr>
</tbody>
</table>
it down, and then press the Numlock key

A\>DIR/P * this option selects Page mode

A\>DIR/W * this option selects wide display

A\>DIR*.COM * lists all files with extension ".COM"

A\>DIR B* * lists all files which start with "B".

A\>DIR B:ARTICLE*.TXT * lists all files in the B drive starting with "ARTICLE" and extension.TXT

A\>DIR ACC* * lists all files ..............

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6. How to format a diskette?
   i) Place a blank disk into the B drive.
   ii) Type FORMAT B:
   iii) Press <RETURN>
   iv) On completion, place another blank diskette into the B drive and format another diskette.

NOTE: The * is a wild card which replaces a character or a group of characters in the file name.
NOTE

FORMAT.COM — this external command initializes a new diskette or reinitialises an old one destroying all existing information. All blank diskettes must be formatted before they can be used by DOS. During this process, the computer checks the integrity of the disk and prepares it for recording files.

The syntax for this command is:

\texttt{FORMAT [drive name] [:] [/S] [/V]}

where \texttt{option/S} tells DOS to transfer the system image over to the new diskette, ie. make the diskette self-bootable. The system files takes about \texttt{30k bytes} out of your \texttt{360k bytes} in the empty diskette.

where \texttt{option/V} tells DOS to create a volume label for the diskette. (vol. label can have a max. of 11 characters). In this option, you have to label the volume during formatting. e.g. For the first diskette, you may wish to type “Volume 1”, for the second diskette, you may wish to type “Volume 2” etc.

Other examples of formatting in drive B:

\texttt{A\textgreater FORMAT B:/V} \hspace{1cm} \texttt{(prompt for volume label)}
\texttt{A\textgreater FORMAT B:/S} \hspace{1cm} \texttt{(copy DOS over)}
\texttt{A\textgreater FORMAT B:V/S} \hspace{1cm} \texttt{(see above)}

7. How to check volume at the formatted diskette?
   i) \texttt{A\textgreater DIR B:}
   ii) Press \texttt{<RETURN>}
   iii) Write the volume of the diskette you formatted.

   \underline{\text{_______}} \text{bytes total disk space}

   \underline{\text{_______}} \text{bytes used by system}

   \underline{\text{_______}} \text{bytes available on disk}
8. How to create a programme with the line editor?
   i) Place DOS into drive A.
   ii) Type EDLIN followed by <your name>.
   iii) You will see
       New file
       *
   iv) Type the letter i and press <RETURN>
       (now you have entered the edlin file with the insert mode)
   v) You will see
       *1
   vi) Type your friend’s name at *1 and press <RETURN>
   vii) You will see
       *2
   viii) Type his/her address at *2 and press <RETURN>
   ix) Press the function key “F6” to exit the edlin file.
   x) * Type letter “e” to end and save your notes.
   xi) At the A, type the word “DIR” and you will find that you have created and saved a file.

9. How to copy files?
   The COPY command duplicates a single file from a diskette onto another. You can use this command to copy or backup your files. Now insert a formatted diskette into the B drive. Use the copy command to copy the file you created into the diskette in the B drive.

   The format of the COPY command is:

   A>COPY [your filename] B:

   Try this now.
You can also use
\[ \text{A}\text{COPYB} \text{ A:B:} \] to copy the entire diskette
\[ \text{A=SOURCE, B=TARGET} \]

OR
\[ \text{A}\text{DISCOPY B: A:} \]
\[ \text{B=SOURCE, A=TARGET} \]

10. Other useful DOS commands

**TYPE** — to display the content of a file on the screen.

e.g. \[ \text{A}\text{TYPE ARTICLE} \] display a file called
\[ \text{ARTICLE} \] on the screen.

**PRINT** — prints text files on a printer while you are
processing other commands (i.e. background
printing).

e.g. \[ \text{A}\text{PRINT ARTICLE} \] prints file \[ \text{ARTICLE} \]

**MODE** — sets mode on printer/display

e.g. \[ \text{A}\text{MODE LPT 1:132,8} \] sets printer to print 132
characters per line & 8
lines per inch

**RENAME** — change the name of a file

e.g. \[ \text{A}\text{REN CURRENT LAST} \] change the filename
\[ \text{CURRENT} \] to \[ \text{LAST} \]

**ERASE & DEL** — these two commands let you remove
files which you no longer want and
make their space available for new
files.

e.g. \[ \text{A}\text{ERASE B:*.BAK} \] remove all files with the
extension \[ .BAK \] from
diskette in B drive
If you wish to learn more about DOS, turn to the operational manual of your computer. This article could prove useful before you do that.