

Section #01

DOS (Disk Operating System)

DOS Commands:

- ❖ DOS Commands are instructions to perform tasks on files and directories very useful to Windows users.
- ❖ DOS commands are case insensitive.
- ❖ File is the area where we store group of information or data, and collection of groups of files is called a directory.
- ❖ List of some of the important types of files:

Text file	.txt
Command file	.com
System file	.sys
Program file	.prg
Database file	.dbm
Library file	.lib
Batch file	.bat
Executable file	.exe

- ❖ MS-DOS commands perform tasks like:
 - Manage files and directories
 - Maintain Disks
 - Configure Hardware and Networking
 - Optimize the use of memory
 - Customize MS-DOS

❖ Most Used Internal DOS Commands

1) DATE

This command is used to display the system current date setting and prompt you to enter a new date. The syntax is: **DATE [/T /date]**

```
C:\>date
The current date is: Tue 03/29/2011
Enter the new date: <mm-dd-yy>

C:\>date/t
Tue 03/29/2011

C:\>
```

If you type DATE without parameters, then it displays current date and prompts to enter new date. We should give the new date in *mm-dd-yy format*. If you want to keep the same date just Press ENTER.

DATE command with /T switch tells the command to just output the current system date, without prompting for a new date.

2) TIME

This command is used to displays or set the system time.

The syntax is: **TIME** [/T / *time*]

```
C:\>time
The current time is: 13:41:53.99
Enter the new time:

C:\>time/t
01:42 PM

C:\>
```

Same as DATE command, typing TIME with no parameters displays the current time and a prompt for a new one. Press ENTER to keep the same time. TIME command used with /T switch tells the command to just output the current system time, without prompting for a new time.

3) COPY CON

It is used to create a file in the existing directory. Here CON is a DOS reserved word which stands for **Console**. Syntax is: **COPY CON filename** after that press Enter and start typing your text and after you're done typing your text, to save and exit hit F6 key.

4) TYPE

This command is used to display the contents of a text file or files. The syntax is: **TYPE** [*drive:*][*path*] filename Now, let's try to display the contents of the file named filename we've created earlier using COPY CON command.

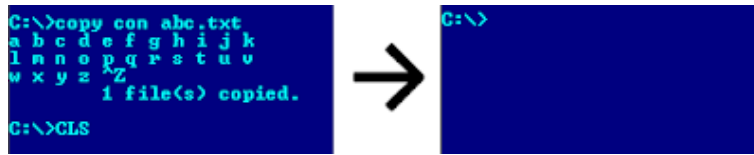
```
C:\>copy con filename
-----
COPY CON Command is used to
create a file in the existing
directory, so here we're creating
a file named filename in C drive.

To save and exit type F6, which I'm
gonna do now ^Z
      1 file(s) copied.

C:\>
```

5) CLS

It is used to clear the screen. Syntax is CLS



6) REN

This command is used to change/modify the name of a file or files. Syntax is **REN** *[drive:] [path] filename1 filename2*. Here, filename1 is source file for which you wanted to change the name, and filename2 will obviously become your new file name. Also note that you cannot specify a new drive or path for your destination file.

7) DIR

This command displays a list of files and subdirectories in a directory. Syntax is: **DIR** *[drive:] [path] [filename][/A[:attributes]] [/B] [/C] [/D] [/L] [/N] [/O[:sortorder]] [/P] [/Q] [/S] [/T[:timefield]] [/W] [/X]*

[drive:][path][filename]	Specifies drive, directory, and/or files to list.
/A:attributes	Displays files with specified attributes. The possible attributes are as follow: D → Directories, R → Read only files, H → Hidden files, A → Files ready for archiving, S → System files, – Prefix meaning not
/B	display in bare format with no heading information or summary
/C	Using this attribute with dir by default displays the thousand separators in file sizes. To disable display or separator use /-C
/D	Displays file list sorted by column.
/L	Uses lowercase in listing file names and sub directories.
/N	Display in new long list format where filenames are on the far right.
/O:sortorder	Displays list by files in sorted order. The sort order attributes are as follow: N → By name (alphabetic), S → By size (smallest first), E → By extension (alphabetic), D → By date/time (oldest first), G → Group directories first, – Prefix to reverse order
/P	Display page wise pausing after each screenful of information and prompts to press any key to continue.
/Q	Displays the owner of a file or files.
/S	Displays files in specified directory and all subdirectories. Bear caution in using this in your root directory as you may end up in overflowing

	information. To stop the screen from overflowing at any point hit Pause-Break key.
T:timefield	This sorts and displays the list based on time field specified. C for creation, A for Last Access, W for Last Written
/W	Displays list width wise or wide list format.
/X	This is used to display the short names generated for non-8dot3 file names.

8) VER

This command displays the version of the Microsoft Windows running on your computer.

9) VOL

It displays the disk volume label and serial number if they exist for the drive specified.

If no drive is specified it displays the active drive. Syntax is ***VOL [drive:]***

```
C:\>vol
Volume in drive C has no label.
Volume Serial Number is EC21-77CD

C:\>vol e:
Volume in drive E is New Volume
Volume Serial Number is 60B4-4F09

C:\>
```

10) DEL/ERASE

Used to delete one or more files. Syntax is ***DEL [/P] [/F] [/S] [/Q] /A[:attributes]***

names

names	Specifies a list of one or more files or directories. Wildcards * and? may be used to delete multiple files. * Indicates group of unknown characters when using wildcard? in file-names is for single unknown character.
/P	Prompts for (Y)es/(N)o confirmation before deleting each file. <pre>C:\>del abc.txt/p C:\abc.txt, Delete (Y/N)? Y C:\></pre>
/F	Used to force delete read-only files.
/S	Delete specified files from all subdirectories. If Command Extensions are enabled DEL and ERASE change while using /S switch such that it shows you only the files that are deleted, not the ones it could not find.
/Q	Delete in quiet mode and do not ask if ok to delete on global wildcard
/A:attributes	Delete files based on specified attribute. The attributes are R for Read-only files, S for System files, H for Hidden files, A for files ready for archiving and – Prefix meaning not.

11) COPY

This command is useful in copying one or more files to another file or location. Syntax is ***COPY [/D] [/V] [/N] [/Y | /-Y] [/Z] [/A | /B] source [/A | /B] [+source [/A | /B] [+...]] [destination [/A | /B]]*** The different switches that can be used with this command as follow along with their use.

Source	It specifies the file or files to be copied.
/A	Indicates an ASCII text file.
/B	This switch indicates a binary file.
/D	This allows the destination file to be created with decryption.
destination	This specifies the directory and/or filename for the new file or files.
/V	Helps to verify new files to be written correctly.
/N	Specifying this switch uses short filename, if available, when copying a file with a non-8dot3 file name.
/Y	If destination file already exists, this switch suppresses prompting to confirm you want to overwrite it and does it asap.
/-Y	Contrary to above switch, this causes prompting to confirm you want to overwrite an existing destination file.
/Z	Copies networked files in restartable mode.

For appending multiple files for source use wildcard or file1+file2+file3 format and make sure to specify a single file for destination.

12) MD, CD and RD

MD (or MKDIR) command stands for make directory and it is used to create a directory. Syntax is ***MD [drive:] path***

13) CD (or CHDIR)

Stands for create or change directory and it allows to display the name of or change the current directory or rather we can say come out of a directory.

Syntax is CD [/D] [drive:][path]

This CD (or CHDIR) command does not treat spaces as delimiters.

CHDIR program filesmozilla firefox is the same as:

CHDIR “program filesmozilla firefox”

→ Typing CD drive: displays the current directory in the specified drive.

→ If you type CD without any parameters, it displays current drive and directory.

→Cd .. Go back one step.

→Cd \ Go back all steps.

→Using /D switch changes current drive-in addition to current directory for a drive.

```
C:\>CD /D e:\sftw  
E:\sftw>
```

14) RD (or RMDIR)

Command removes or deletes a directory. There are two conditions to remove any directory – (1) Directory to be removed should be empty. and (2) We should be outside the directory we are commanding to delete.

Syntax is RD [/S] [/Q] [drive:] path Here, using the switch /S removes a directory tree meaning it removes all directories and files in the specified directory in addition to the directory itself. And using /Q is the quiet mode that doesn't ask for ok approval to remove a directory tree.

15) PROMPT

This changes the cmd.exe command prompt. By default, the prompt is always set to the name of current drive followed by > sign. Customize the Prompt To customize the prompt to display any text of your choice, use the syntax prompt anytext and this will change the prompt to new command prompt anytext.

Prompt with Options (or Special Codes)

You can use prompt with options. To let the prompt, display the current working directory use prompt \$p\$g

\$p in the above signifies the current drive and path.

\$g signifies the greater than sign >

```
C:\ C:\WINDOWS\system32\cmd.exe  
C:\>  
C:\>prompt anytext$g  
anytext>prompt $p$g  
C:\>prompt OSHO$G  
OSHO>prompt myprompt  
mypromptprompt myprompt$g  
myprompt>prompt $p$g  
C:\>
```

The other options used with prompt command are as follows.

Any combination of these can be used with prompt command.

\$A & (Ampersand)

\$B | (pipe character)

\$C ((Left parenthesis)

\$D Current date

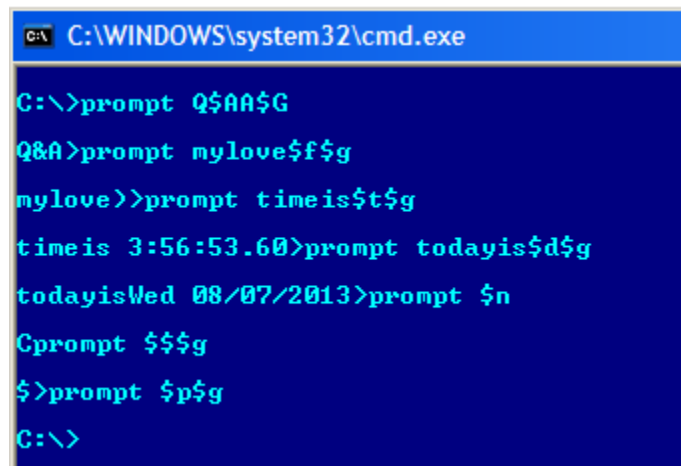
\$E Escape code (ASCII code 27)

\$F) (Right parenthesis)

\$H Backspace (erases previous character)

\$L < (less-than sign) \$N Current drive \$Q = (equal sign) \$T Current time \$V

Windows XP version number \$_ Carriage return and linefeed \$\$ \$ (dollar sign)



```
C:\WINDOWS\system32\cmd.exe

C:\>prompt Q$AA$G
Q&A>prompt mylove$f$g
mylove>>prompt timeis$t$g
timeis 3:56:53.60>prompt todayis$d$g
todayisWed 08/07/2013>prompt $n
C>prompt $$$g
$>prompt $p$g
C:\>
```

16) Color

Used for changing the colors for the console's foreground and background. By default, the console has white foreground color and black background color (07 color code).


Color attributes are specified by two hex digits –

First corresponds to the background.

Second corresponds to the foreground.

0 = Black	8 = Gray
1 = Blue	9 = Light Blue
2 = Green	A = Light Green
3 = Aqua	B = Light Aqua
4 = Red	C = Light Red
5 = Purple	D = Light Purple
6 = Yellow	E = Light Yellow
7 = White	F = Bright White

Color [attr] attr - Specifies the color attribute of console output.

 Command Prompt

```
C:\Users\A.Eldemoksy>color 0a  
C:\Users\A.Eldemoksy>
```

17) attrib

Display and change file attributes (+h hide, -h unhide, +r read only, -r)

```
C:\MET10\Folder1>attrib +h a.txt 1  
C:\MET10\Folder1>attrib -h a.txt 2  
C:\MET10\Folder1>attrib +r a.txt 3  
C:\MET10\Folder1>attrib -r a.txt 4  
C:\MET10\Folder1>_
```