

**Experiment No. 10 Title: DOS Commands**

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**Batch: B2 Roll No: 16010420117 Experiment No: 10**

**Aim:** To explore basic DOS commands.

# Resources needed: Windows OS

**Theory:**

# Pre lab/Prior concepts:

Students have to execute the following MS-DOS commands and record the output. It is not necessary that all of the below mentioned commands will work.

**Command Description Type**

ansi.sys Defines functions that change display graphics, control cursor movement, and reassign keys.

append Causes MS-DOS to look in other directories when editing a file or running a command.

arp Displays, adds, and removes arp information from network devices.

File

External

External

assign Assign a drive letter to an alternate letter. External assoc View the file associations. Internal at Schedule a time to execute commands or programs. External

atmadm Lists connections and addresses seen by Windows ATM call manager.

Internal

attrib Display and change file attributes. External

batch Recovery console command that executes several commands in a file.

Recovery

bcdedit Modify the boot configuration data store. External

bootcfg Recovery console command that allows a user to view, modify, and rebuild the boot.ini file.

Recovery

break Enable and disable Ctrl+C feature. Internal

cacls View and modify file ACL's. External call Calls a batch file from another batch file. Internal cd Changes directories. Internal

chcp Supplement the international keyboard and character set information.

External

chdir Changes directories. Internal chkdsk Check the hard drive running FAT for errors. External chkntfs Check the hard drive running NTFS for errors. External choice Specify a listing of multiple options within a batch file. External

clip Redirect command line output to the Windows clipboard.

External

cls Clears the screen. Internal

cmd Opens the command-line interpreter called COMMAND.COM.

color Change the foreground and background color of the MS-DOS window.

Internal

Internal

command Opens the command interpreter. Internal

comp Compares files. External

compact Compresses and uncompress files. External control Open Control Panel icons from the MS-DOS prompt. External convert Convert FAT to NTFS. External copy Copy one or more files to an alternate location. Internal ctty Change the computer's input/output devices. Internal date View or change the systems date. Internal debug Debug utility to create assembly language programs to External

modify hardware settings.

defrag Re-arrange the hard drive to help with loading programs.

External

del Deletes one or more files. Internal delete Recovery console command that deletes a file. Internal deltree Deletes one or more files or directories. External dir List the contents of one or more directory. Internal

disable Recovery console command that disables Windows system services or drivers.

Recovery

diskcomp Compare a disk with another disk. External

diskcopy Copy the contents of one disk and place them on another disk.

doskey Command to view and execute commands that were ran in the past.

External

External

dosshell A GUI to help with early MS-DOS users. External

driverquery Display a list of installed device drivers. External drivparm Enables overwrite of original device drivers. Internal echo Displays messages and enables and disables echo. Internal edit View and edit files. External

edlin View and edit files. External

emm386 Load extended memory manager. External

enable Recovery console command to enable a disable service or driver.

endlocal Stops the localization of the environment changes enabled by the setlocal command.

Recovery

Internal

erase Erase files from the computer. Internal

exit Exit from the command interpreter. Internal

expand Expand a Microsoft Windows file back to its original format.

External

extract Extract files from the Microsoft Windows cabinets. External

fasthelp Displays a listing of MS-DOS commands and information about them.

External

fc Compare files. External

fdisk Setup drive by create and managing partitions on the hard drive.

External

find Search for text within a file. External findstr Searches for a string of text within a file. External fixboot Writes a new boot sector. Recovery fixmbr Writes a new boot record to a disk drive. Recovery for Boolean used in batch files. Internal

format Command to erase and prepare a disk drive. External ftp Command to connect and operate on an FTP server. External

fType Displays or modifies file types used in file extension associations.

Recovery

goto Moves a batch file to a specific label or location. Internal graftabl Show extended characters in graphics mode. External help Display a listing of commands and brief explanation. External

if Allows for batch files to perform conditional processing.

Internal

ifshlp.sys 32-bit file manager. External

ipconfig Network command to view network adapter settings and assigned values.

External

keyb Change layout of keyboard. External

label Change the label of a disk drive. External

lh Load a device driver in to high memory. Internal

listsvc Recovery console command that displays the services and drivers.

Recovery

loadfix Load a program above the first 64 k. External

loadhigh Load a device driver in to high memory. Internal

lock Lock the hard drive. Internal logoff Logoff the currently profile using the computer. External

logon Recovery console command to list installations and enable administrator login.

Recovery

map Displays the device name of a drive. Recovery

md Command to create a new directory. Internal

mem Display memory on system. External

mkdir Command to create a new directory. Internal

mklink Creates a symbolic link. Internal

mode Modify the port or display settings. External

more Display one page at a time. External

move Move one or more files from one directory to another directory.

Internal

msav Early Microsoft virus scanner. External

|  |  |  |
| --- | --- | --- |
| msd | Diagnostics utility. | External |
| mscdex | Utility used to load and access the CD-ROM. | External |

nbtstat Displays protocol statistics and current TCP/IP connections using NBT.

External

net Update, fix, or view the network or network settings. External

netsh Configure dynamic and static network information from MS-DOS.

netstat Display the TCP/IP network protocol statistics and information.

External

External

nlsfunc Load country specific information. External

nslookup Look up an IP address of a domain or host on a network.

External

path View and modify the computer's path location. Internal pathping View and locate locations of network latency. External

pause Command used in batch files to stop the processing of a command.

ping Test and send information to another network computer or network device.

Internal

External

popd Changes to the directory or network path stored by the Internal pushd command.

|  |  |  |
| --- | --- | --- |
| power | Conserve power with computer portables. | External |
| print | Prints data to a printer port. | External |
| prompt | View and change the MS-DOS prompt. | Internal |

pushd Stores a directory or network path in memory so it can be returned to at any time.

Internal

qbasic Open the QBasic. External

rd Removes an empty directory. Internal

ren Renames a file or directory. Internal

rename Renames a file or directory. Internal

rmdir Removes an empty directory. Internal robocopy A robust file copy command for the Windows command External

line.

|  |  |  |
| --- | --- | --- |
| route | View and configure Windows network route tables. | External |
| runas | Enables a user to run a program as a different user. | External |

sc Communicate with the Service Control Manager and services.

External

scandisk Run the ScanDisk utility. External scanreg Scan registry and recover registry from errors. External set Change one variable or string to another. Internal

setlocal Enables local environments to be changed without affecting anything else.

setver Change MS-DOS version to trick older MS-DOS programs.

Internal

External

share Installs support for file sharing and locking capabilities. External

shift Changes the position of replaceable parameters in a batch program.

Internal

shutdown Shutdown the computer from the MS-DOS prompt. External

smartdrv Create a disk cache in conventional memory or extended memory.

External

sort Sorts the input and displays the output to the screen. External

start Start a separate window in Windows from the MS-DOS prompt.

subst Substitute a directory on your computer for another drive letter.

Internal

External

switches Remove add functions from MS-DOS. Internal

sys Transfer system files to disk drive. External telnet Telnet to another computer or device from the prompt. External time View or modify the system time. Internal title Change the title of their MS-DOS window. Internal

tracert Visually view a network packets route across a network.

External

tree View a visual tree of the hard drive. External

type Display the contents of a file. Internal

undelete Undelete a file that was deleted. External

|  |  |  |
| --- | --- | --- |
| unformat | Unformat a hard drive. | External |
| unlock | Unlock a disk drive. | Internal |
| ver | Display the version information. | Internal |

verify Enables or disables the feature to determine if files were written properly.

vol Displays the volume information about the designated drive.

xcopy Copy multiple files, directories, or drives from one location to another.

Internal

Internal

External

**Results:** Output must be recorded in a separate text/ doc file saved as <Roll No\_Batch No\_Date>(No snapshot s to be attached or pasted in this file)

# This file must contain on the top: Name:

**Roll No. Exp No. Batch:**

# Date:

And Students have to upload this document electronically.

# Questions:

1. What difference you observed in using MS-DOS and Ubuntu terminal commands?

Ans: MS-DOS is not case sensitive whereas Ubuntu terminal was case sensitive.

MS-DOS uses backslashes and ubuntu terminal uses forward slashes.

MS-DOS has batch files and ubuntu contains shell files.

MS-DOS is widely used in embedded systems while Ubuntu is used on the servers.

DOS lacks virtual and protected memory while Ubuntu has both.

1. Give any 5 commands that have same output in MS-DOS and Ubuntu terminal but differs in nomenclature.

Ans:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sr. No. | Task Performed | DOS Command | Output | Linux Command |
| 1 | File copying | copy [filepath] [newfilepath] |  | cp [filepath] [newfilepath] |
| 2 | Clear terminal | cls | C:\Users\OS\_IT\_B317\Desktop\RintronGlade> | clear |
| 3 | Displays time | time | C:\Users\OS\_IT\_B317\Desktop\RintronGlade>time  The current time is: 14:49:17.01 | date |
| 4 | Rename a file | ren [file path] [file name] [new name] | C:\Users\OS\_IT\_B317\Desktop\RintronGlade>dir  Volume in drive C has no label.  Volume Serial Number is 9A99-D046  Directory of C:\Users\OS\_IT\_B317\Desktop\RintronGlade  11/07/2022 02:43 PM <DIR> .  11/07/2022 02:43 PM <DIR> ..  11/07/2022 02:43 PM 5 xyz.txt.txt  1 File(s) 5 bytes  2 Dir(s) 149,852,463,104 bytes free  C:\Users\OS\_IT\_B317\Desktop\RintronGlade>ren C:\Users\OS\_IT\_B317\Desktop\RintronGlade\xyz.txt.txt xyz.txt  C:\Users\OS\_IT\_B317\Desktop\RintronGlade>dir  Volume in drive C has no label.  Volume Serial Number is 9A99-D046  Directory of C:\Users\OS\_IT\_B317\Desktop\RintronGlade  11/07/2022 02:53 PM <DIR> .  11/07/2022 02:53 PM <DIR> ..  11/07/2022 02:43 PM 5 xyz.txt  1 File(s) 5 bytes  2 Dir(s) 149,856,067,584 bytes free | mv [old name] [new name] |
| 5 | Delete a file (delete xyz.txt) | del xyz.txt | C:\Users\OS\_IT\_B317\Desktop\RintronGlade>del xyz.txt  C:\Users\OS\_IT\_B317\Desktop\RintronGlade> | rm xyz.txt |
| 6 | Shows information about system | systeminfo | C:\Users\OS\_IT\_B317\Desktop\RintronGlade>systeminfo  Host Name: DESKTOP-BKEDTQD  OS Name: Microsoft Windows 10 Pro for Workstations  OS Version: 10.0.18363 N/A Build 18363  OS Manufacturer: Microsoft Corporation  OS Configuration: Standalone Workstation  OS Build Type: Multiprocessor Free  Registered Owner: OS\_IT\_B317  Registered Organization:  Product ID: 00391-90090-60463-AA524  Original Install Date: 9/20/2022, 11:55:10 PM  System Boot Time: 11/7/2022, 10:43:53 AM  System Manufacturer: Dell Inc.  System Model: OptiPlex 3010  System Type: x64-based PC  Processor(s): 1 Processor(s) Installed.  [01]: Intel64 Family 6 Model 58 Stepping 9 GenuineIntel ~3300 Mhz  BIOS Version: Dell Inc. A08, 12/7/2012  Windows Directory: C:\Windows  System Directory: C:\Windows\system32  Boot Device: \Device\HarddiskVolume1  System Locale: en-us;English (United States)  Input Locale: 00004009  Time Zone: (UTC+05:30) Chennai, Kolkata, Mumbai, New Delhi  Total Physical Memory: 8,094 MB  Available Physical Memory: 4,472 MB  Virtual Memory: Max Size: 9,374 MB  Virtual Memory: Available: 5,369 MB  Virtual Memory: In Use: 4,005 MB  Page File Location(s): C:\pagefile.sys  Domain: WORKGROUP  Logon Server: \\DESKTOP-BKEDTQD  Hotfix(s): 7 Hotfix(s) Installed.  [01]: KB4515871  [02]: KB4513661  [03]: KB4516115  [04]: KB4517245  [05]: KB4521863  [06]: KB4577586  [07]: KB4517389  Network Card(s): 1 NIC(s) Installed.  [01]: Realtek PCIe GbE Family Controller  Connection Name: Ethernet  DHCP Enabled: No  IP address(es)  [01]: 172.17.17.27  [02]: fe80::a0e9:ddb3:58c4:d011  Hyper-V Requirements: VM Monitor Mode Extensions: Yes  Virtualization Enabled In Firmware: Yes  Second Level Address Translation: Yes  Data Execution Prevention Available: Yes | uname |
| 7 | Returns our current location in directory | chdir | C:\Users\OS\_IT\_B317\Desktop\RintronGlade>chdir  C:\Users\OS\_IT\_B317\Desktop\RintronGlade | pwd |
| 8 | Print contents of a file | type | C:\Users\OS\_IT\_B317\Desktop\RintronGlade>type xyz.txt  hello | cat |
| 9 | List running tasks | tasklist | C:\Users\OS\_IT\_B317\Desktop\RintronGlade>tasklist  Image Name PID Session Name Session# Mem Usage  ========================= ======== ================ =========== ============  System Idle Process 0 Services 0 8 K  System 4 Services 0 144 K  Registry 96 Services 0 76,444 K  smss.exe 416 Services 0 1,148 K  csrss.exe 540 Services 0 5,700 K  wininit.exe 616 Services 0 6,560 K  services.exe 824 Services 0 8,832 K  lsass.exe 832 Services 0 20,104 K  svchost.exe 960 Services 0 3,764 K  fontdrvhost.exe 976 Services 0 2,304 K  svchost.exe 8 Services 0 27,012 K  svchost.exe 484 Services 0 15,136 K  svchost.exe 780 Services 0 7,708 K  svchost.exe 1176 Services 0 14,456 K | ps x |

**Outcomes: CO4:** Understanding Open source.

**Conclusion:** Basic DOS commands were explored, observed understood and successfully implemented. We also compared them with Linux commands.

# Grade: AA / AB / BB / BC / CC / CD /DD

**Signature of faculty in-charge with date**

# Referred Books/Internet sources:

* 1. https://[www.computerhope.com/overview.htm](http://www.computerhope.com/overview.htm)