**CMD commands: (case insensitive)**

* dir: Lists files and directories in the current directory.

Example: dir /s /b (lists all files recursively with full path)

Flag: Display list of directories/file:

/s all files and directories in subdirectories in current directory recursively

/b in bare formate

/o: n (or d or g or s) order by name, date (descending), group or size.

/tw /ta /tc order by last written / last accessed / last changed timestamp

/l in lowercases

/e list only empty directories

/ah /ad /as only hidden or only directories or only system files

**Command /? Help for particular command**

* cd: Changes the current directory.

Example: cd C:\Windows (changes directory to C:\Windows)

To change drives simply type drive name and “:” >D:

To go back one step back: cd ..

To go 2 steps back: cd ../..

Current path: ./

* mkdir: Creates a new directory.

Example: mkdir NewFolder (creates a directory named NewFolder)

Multiple directories: mkdir Folder1 Folder2 Folder3

At specified path: mkdir C:\Path\To\NewFolder

Create multiple directories with a specific path: mkdir C:\Path\To\Folder1 C:\Path\To\Folder2 C:\Path\To\Folder3

Nested Directories: mkdir newFolder1/newFolder2

Creates a directory structure "Path\To\Nested\Folder" recursively, creating any missing intermediate directories. mkdir -p Path\To\Nested\Folder

Create Directory with spaces in the name: mkdir "Folder with Spaces"

* rmdir: Removes a directory.

Example: rmdir OldFolder

Remove directory and all its contents (including subdirectories):rmdir OldFolder /s

Remove directory without asking for the confirmation: rmdir OldFolder /q

Remove multiple directories at once: rmdir /s /q directory1 directory2 directory3

* del: Deletes a file.

Example: del File.txt (deletes a file named File.txt)

Delete multiple: del C:\Folder1\File1.txt C:\Folder2\File2.txt D:\Folder3\File3.txt

Delete with name pattern: del C:\Folder1\\*.txt OR del C:\Folder1\Fi\*.txt OR del C:\Folder\\*Fi.txt

* copy: Copies a file.

Example: copy File.txt NewFolder (copies File.txt to NewFolder)

For multiple files: copy source\_file1 source\_file2 ... destination\_directory

For multiple files of same type: copy source\_files\_path/\*.<type> destination\_path

For multiple files starting or ending with same name: copy C:\SourceDirectory\<name\_piece>\*.txt D:\DestinationDirectory OR copy C:\SourceDirectory\\*<ending-name>.txt D:\DestinationDirectory

* move: Moves a file.

Example: move File.txt NewLocation (moves File.txt to NewLocation)

Multiple move: move C:\Folder1\File1.txt C:\Folder2\File2.txt D:\DestinationFolder

Only the last will be the destination directory

Mattern Matched files only: move C:\SourceDirectory\file\*.txt D:\DestinationDirectory

* ren: Renames a file.

Example: ren OldName.txt NewName.txt (renames OldName.txt to NewName.txt)

Multiple rename: ren C:\Folder2\File\*.txt NewFile\*.txt

This renames all files in C:\Folder2 that match the pattern File\*.txt to NewFile\*.txt. For example, File1.txt becomes NewFile1.txt, File2.txt becomes NewFile2.txt, and so on.

ren C:\Folder1\File1.txt D:\Folder2\RenamedFile.txt

This renames File1.txt in C:\Folder1 to RenamedFile.txt in D:\Folder2.

* type: Displays the contents of a text file.

Example: type File.txt (displays the contents of File.txt)

* echo: Displays messages or turns command echoing on/off.

Example: echo Hello, World! (displays the message "Hello, World!")

* comp: file content comparator:

Syntax: comp /a <file1> <file2> /a flag helps to find first mismatching character if any.

* cls: Clears the screen.

Example: cls (clears the terminal screen)

* cmd: cmd command starts a new instance of the command interpreter in the same window. Without any patamenters it will only showcase the current cmd version. With /c flag you will execute the coomand “x” and return to the current state. But with flag /k you will execute the command and stay the the updated state only. Example:

D:\> cmd /c del C:/new/file.txt It will delete the file,,txt from mentioned directory path and return to the current directory location.

But with /k flag, we will remain in the “C:/new/” directroy after executing del command.

Syntax: cmd <flag> <command>

* exit: Exits the command prompt or a script.

Example: exit (exits the command prompt)

* arp: Get Address resolution protocol table/cache

Example: Display cache: arp -a

Insert an entry: arp -s IPAddress MACAddress

Delete an entry: arp -d IPAddress

* ping: Sends a network ICMP echo request to a specified IP address or domain.

Example: ping google.com (sends ICMP echo requests to google.com)

ping provides information about the response time (usually measured in milliseconds), whether the host is reachable, and whether there is any packet loss. It gives a quick indication of the network connectivity between your computer and the target IP address or host.

* tracert: tracert is used to trace the route that packets take from your computer to a specified destination IP address or hostname. It helps identify the path and the number of hops (intermediate routers) taken by packets to reach the destination.

tracert <host address (IP/domain)>

tracert provides a list of IP addresses (routers) along the route to the destination, along with the response time from each router. It helps identify any network latency or routing issues between your computer and the destination.

* ipconfig: Displays IP configuration information.

Example: ipconfig /all (displays detailed IP configuration information)

Flush DNS cache: ipconfig /flushdns

To show the full TCP/IP configuration for all adapters: ipconfig /all

Renew the DHCP IP address for the local area connection with: ipconfig /renew Local Area connection

* date: Print current date: date /t
* time Print current time: time /t
* color: Change terminal background color and font color: color <background><font>: color XY OR color X This changes only font color but the prior one changes both font and background color.

color code can be from 0-F. Same colors will not work

* netstat: Displays active network connections and listening ports.

Example: netstat -ano (displays active connections with process IDs)

* tasklist: Lists all running processes.

Example: tasklist /v (lists processes with verbose information)

* taskkill: Terminates a running process.

Example: taskkill /f /pid 1234 (terminates process with ID 1234 forcibly)

* systeminfo: Displays detailed information about the computer's hardware and software.

Example: systeminfo (displays system information)

* sfc /scannow: Scans system files for errors and attempts to fix them.

Example: sfc /scannow (scans system files for errors)

* chkdsk: Checks a disk for errors and attempts to fix them.

Example: chkdsk C: /f (checks disk C: for errors and fixes them)

* xcopy: Copies files and directories with advanced options.

Example: xcopy SourceFolder DestinationFolder /e /y (copies SourceFolder to DestinationFolder with subdirectories and overwrites existing files)

* find: Searches for a specific text string in files.

Example: find "keyword" File.txt (searches for "keyword" in File.txt)

* sort: Sorts the contents of a text file.

Example: sort File.txt (sorts the lines in File.txt alphabetically)

* attrib: Displays or modifies file attributes.

Example: attrib +h File.txt (hides File.txt by setting the hidden attribute)

General systax: attrib <+ or -> <attribute> where attributes can be H(hidden) R(read only) and S(system file). + and – is to add or remove the attributes.

* format: Formats a disk drive.

Example: format D: (formats disk drive D:)

* xcopy: Copies files and directories with advanced options.

Example: xcopy SourceFolder DestinationFolder /e /y (copies SourceFolder to DestinationFolder with subdirectories and overwrites existing files)

* tree: Displays the folder structure of a directory.

Example: tree /f (displays the folder structure with files)

* assoc: Displays or modifies file associations.

Example: assoc .txt (displays the file association for .txt files)

* ftype: Displays or modifies file type associations.

Example: ftype txtfile (displays the file type association for .txt files)

* taskmgr: Opens the Task Manager.

Example: taskmgr (opens the Task Manager)

* calc: Opens the Calculator.

Example: calc (opens the Calculator)

* notepad: Opens Notepad.

Example: notepad File.txt (opens File.txt in Notepad)

* control: Opens the Control Panel.

Example: control (opens the Control Panel)

* shutdown: Shuts down or restarts the computer.

Example: shutdown /s /t 0 (shuts down the computer immediately)

* systempropertiesadvanced: Opens the Advanced System Properties.

Example: systempropertiesadvanced (opens the Advanced System Properties)

* powercfg: Configures power settings.

Example: powercfg /batteryreport (generates a battery usage report)

* takeown: Takes ownership of a file or directory.

Example: takeown /f File.txt (takes ownership of File.txt)

* icacls: Displays or modifies file and folder permissions.

Example: icacls Folder /grant User:(OI)(CI)F (grants full control to User for the folder)

* cipher: Displays or modifies file encryption on NTFS volumes.

Example: cipher /e /s:C:\Folder (encrypts files within the folder)

* net share: Displays or configures shared resources (folders, printers) on the network.

Example: net share (displays shared resources)

* net use: Connects or disconnects network shares.

Example: net use Z: \\Server\Share (connects to a network share)

* net user: Displays or modifies user accounts.

Example: net user username password /add (creates a new user account)

* net group: Displays or modifies user groups.

Example: net group groupName /add (creates a new user group)

* regedit: Opens the Windows Registry Editor.

Example: regedit (opens the Registry Editor)