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Introduction to Linux and Terminal Commands

* Shell: A shell is a program that provides the traditional, text-only user-interface for Linux or other UNIX-like Operating system.

* ls command - Lists all the directories / files.

* mkdir command - Makes a new directory

* cd command - Changes directory

* cd .. command - Go back to previous directory.

* Environment Variables - Set of dynamic named values, set outside the program, typically through functionality built into OS or microservices.

* ls -a command - Lists hidden files (starts with .)

* pwd command - Present Working Directory

* ls -l command - Lists files with more details.

* ls -R command - List all files from sub-dirs. too

* cat command - Shows content of a file.

* echo command - Shows the desired string or value.

* man command - Tells about all commands.

* tr command: Translates a file.

For eg. - cat file.txt
Hello World

cat file.txt | tr a-z A-Z > upper.txt
cat upper.txt
HELLO WORLD

* touch command - Creates a file.

* cp command - Copy files

* mv command - Move files

* rm command - Removes file permanently.

* cp -R command - Copy directory

* mv -R command - Move directory

* rm -R command - Removes directory permanently

* sudo command - Administrative Commands (Password)

* df command - Disk Availability

* du command - Shows size of directories

* head command - Displays first 10 lines

* tail command - Displays last 10 lines.

- * diff command - Compares file line by line and print the differences.
- * locate command - Finds out files. (returns directory)
- * find command - Shows all present files. (acc to requirements)
- * Permissions - • Read • Write • Execute
- * chmod command - To control permissions
4 (read) + 2 (write) + 1 (execute)
For eg. chmod 777 index.txt
- rwx rwx rwx
chmod 577 index.txt
- r-x rwx rwx
chmod 500 index.txt
-r-x-----
- * chown command - To change the file owner/group.
- * grep command - Search for a string in groups of files
 - w (completes the word)
 - i (ignores case-sensitivity)
 - n (line number)
 - r (searches in sub-directories too)
 - c (count for number of appearance)
 - l (lists all files with that string specified)
- * history command - History of command usage.
- * alias command - Instructs shell to replace one string with another string, while executing the command.

⊛ Terminal Shortcuts :

- ctrl + A - Move cursor to first
- ctrl + E - Move cursor to end.
- ctrl + K - Removes everything after cursor.
- ctrl + U - Removes everything
- tab - Auto-completion.
- ! (no. in History) - Bring the command from History
- ctrl + R - Search for previous commands.
- cmd + K - Clear

⊛ sort command - Sorts everything within the file

⊛ jobs command - Processes running are shown

⊛ ping command - Connects to server and receives packet

⊛ wget command - Downloader

⊛ top command - Softwares Running are shown

⊛ uname command - Kernel name

⊛ zip command - Creates compressed file

⊛ unzip command - Unzips file.

⊛ hostname command - Obtain DNS name and information.

⊛ useradd command - Adds user

⊛ userdel command - Removes user.

* lscpu command - CPU details

* free command - Free memory checking

* vmstat command - Virtual memory checking

* id command - See groups

* getent command - Checks if an user exist.

* lsof command - List all the Open files

* nslookup command - To check IP of a domain

* netstat command - Active ports

* sed command - Stream editor (logs)

* cut command - Cut out selected portions of each line of a file.

* htop command - Shows resource consumptions

* Operators : && (AND), || (OR), ! (NOT), >> (append), > (override)