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 programe, typically through function-ality 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.

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* 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.

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* 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 requirement)
* 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.

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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 recieves 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.

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* 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)