LINUX COMMAND *cheat sheet*

SYSTEM COMMANDS

- **uname**: Used to get OS of our instance
- **uname -r:** Used to get kernel version of OS
- **uname -a:** Used to get full information of OS
- **uptime:** Used to get since how log our server is in runing state
- **uptime -p:** It displays only time
- **uptime -s:** It displays about date & time of our system run time
- **hostname:** Used to get hostname of the system
- **hostname -i:** Used to get private ip address of a system
- **ip addr:** Used to get private ip address of a system
- **ip route:** Used to get private ip address of a system
- **ip config:** Used to get private ip address of a system
- **date:** Display the current date
- **date +"%d":** Displays only date
- **date +"%m":** Displays only month
- **date +"%y":** Displays only year
- **date +"%H":** Displays only hours
- **date +"%M":** Displays only minutes
- **date +"%S":** Displays only seconds
- **date +"%D":** Displays date(mm/dd/yyyy)
- **date +"%F":** Displays date (yyyy-mm-dd)
- **date +"%A":** Displays only day of the week
- **date +"%B":** Displays only month of the year
- **timedatectl:** Used to get timezone of our system
- **timedatectl set-timezone Asia/Kolkata:** used to set Indian timezone for our system
- **whoami:** Used to display in which user we login
- **who:** Displays the no.of users login info

PACKAGE INSTALLATION

- **sudo apt-get update:** Updates package lists for upgrades.
- **sudo apt-get upgrade:** Upgrades all upgradable packages
- **sudo apt-get install pkgname:** Install pkgname
- **sudo apt-get remove pkgname:** Removes pkgname4

COPY COMMANDS

- **cp file1 file2:** It copies data from file1 to file, the data will gets overwrite from file2
- **cat file1>>file2:** It copies the data, it will not overwrite the data
- **cp filename directory:** Copy the file to directory

USER COMMANDS

- **cat/et/passwd:** To see list of users
- **useradd username:** To create a user
- **su - username:** To switch to another user
- **passwd username:** To set a password to the user
- **useradd -M username:** To create a user withour directory
- **useradd -e yyyy-mm-dd username:** To set expiry date to an user
- **change -l username:** To get user expiry details
- **userdel username:** To delete a user
- **userdel -r username:** To delete a user with directory

MOVE COMMANDS

- **mv file1 file2:** To rename the file
- **mv filename directory:** Move the file to directory
- **cmp file1 file2:** To compare multiple files at a time
- **diff file1 file2:** To get the difference from multiple files

HARDWARE COMMANDS

- **cat:** Used to read the data in a file
- **/proc:** It is a directory which contains processor of our system
- **cpuinfo:** It contains CPU information
- **lscpu:** Used to get CPUinformation
- **free:** To get RAM info in KB
- **free -m:** To get RAM info in MB
- **df -h:** To get storage ingo about our system
- **fdisk -l:** To get list volumes attached to our system

GROUP COMMANDS

- **cat/et/group:** To see list of groups in a system
- **groupadd groupname:** To create a group
- **groupdel groupname:** To delete a group
- **usermod aa -G groupname username:** To add a user in a group

FILE COMMANDS

TO CREATE FILE

- **touch filename:** To create a file
- **ll:** It gives full info about files
- **ls:** It gives only file names
- **touch file1 file2:** To create multiple files
- **ll -t :** To see latest files on top
- **ll -r:** To see files in reverse order
- **ll -a:** To see all files (including hidden files)

TO REMOVE FILES

- **rm filename:** To delete file with permission
- **rm filename1 filename2:** To delete multiple files with permission
- **rm -f filename:** To delete a file without permission
- **rm -f filename1 filename2:** To delete multiple files without permission
- **rm -f file{1..7}:** To delete files in sequential order
- **rm -f a*:** To delete all files which are started with A name
- **rm -f*.txt:** To delete all text files

TO INSERT DATA IN A FILE

- **cat filename:** To read the data in a file
- **cat>filename:** To insert some data in a file
- **cat>>filename:** To append some data in a file
- **ctrl + d**: To save the data
- **cat -n filename:** To display the data including line numbers
- **head filename:** To print top 10 lines of a file
- **tail filename:** To print last 10 lines of a file
- **sed -n '5,17p' filename:** To print a particular range
- **tac filename:** To print the data in reverse order
- **cat file1 file2:** To read the data from multiple files
- **more file1 file2:** To read the data from multiple file
- **wc filename:** To get no.of lines, words & letters in a file

TO CREATE DIRECTORIES (FOLDERS)

- **mkdir:** To create a directory
- **mkdir file1 file2:** To create a multiple directories
- **mkdir folder{1..5}:** To create sequential directories
- **rmdir foldername:** To remove empty directories
- **rmdir folder1 folder2:** To remove multiple empty directories
- **rmdir folder{1..5}:** To remove empty directories in sequential order
- **rmdir*:** To remove all empty directories
- **rm -rf*:** To remove all files and folders
- **cd foldername:** To change directory
- **pwd:** To get the present working directory
- **cd or cd~:** To go to root directory
- **cd -:** To go back to previous folder
- **cd ../:** To go to one step back folder
- **cd ../../:** To go back to 2 steps back
- **mkdir folder1/folder2:** To create a directory inside a directory
- **ll folder1:** To check the list of files & folders in folder1
- **mkdir -p folder1/folder2/folder3/folder4:** To create parenting directories
- **touch foldername/filename:** To create a file inside a folder.

GREP COMMANDS

GLOBAL REGULAR EXPRESSION PRINT (GREP)

This command is used to search for a word in a file.

- **grep "word" filename:** To search for a word in a file.
- **grep -n "word" filename:** To get the word along with line numbers
- **grep -i -n "word" filename:** To search with case sensitive
- **grep -i -c "word filename:** To get no.of occurrences
- **grep -i -n -e "word1" -e "word2" -e "word3" filename:** To search for multiple words in a single file
- **grep -i -n -e "word1" file1 file2:** To search for single word in a multiple files
- **grep -i -n -e "word1" -e "word2" -e "word3" file1 file2 file3:** To search for multiple words in a multiple files.

FIND COMMANDS

- **find . -name file:** To find in current directory
- **find /proc/ -name filename:** To find a file in proc directory
- **find . -type d -name folder:** To find a folder in current directory
- **find .type f -perm 777:** Finds all the files whose permissions are 777 in the current directory
- **find . -type f -name<file1.txt>:** Find a file in current directory
- **find . -type f! -perm 777:** Finds all files whose permissions are NOT 777 in the current directory
- **find . -perm /u=r:** Finds all Read only files in the current directory
- **find . -perm /a=x:** Finds all executable files in the current directory
- **find . -perm /a=w:** Finds all writable files in the current directory
- **find . -type f -empty:** Find all empty files in the current directory
- **find . -type d -empty:** Find all empty directories in the current directory
- **find / -user <username>:** Finds all the files specific user owned in/ directory
- **find / -group groupname:** Finds all the files group owned in/directory
- **find . -mtime10:** Finds all files which are modified 10 days back in current folder
- **find / -atime100:** Finds all the files which are accessed 10 days back in current folder
- **find . -cmin -60:** Finds all the files which are changed in the last 1 hour in current directory
- **find . -mmin -60:** Finds all files which are modified in last 1hour in current directory
- **find . -amin -60:** Finds all files which are accessed in last 1 hour in current directory
- **find . -size 1k:** Finds all 1kb in current directory
- **find / -size+50M-size-100M:** Finds all files which are greater than 50mb and less than 100mb in/directory

LOCATE COMMANDS

- **locate filename:** Used to locate a word in linux(by default it will not locate, we need to update db ever time)
- **sudo updatedb:** Used to update linux db
- **locate -i filename:** Used to search for a file in case sensitive
- **locate -n 5 "*.txt":** Used to search top 5 text files
- **locate -c aws*:** Used to count no.of aws files present in server

CHANGING OWNER OF A FILE

- **chown username filename:** To change user of a file
- **chgrp groupname filename:** To change group of a file
- **chown username:groupname filename:** To change user & group at a time
- **chown user:group file1 file2 file3:** To change user & group at a time to multiple files
- **chown user:group*:** To change user & group at a time to all files
- **chown user:group foldername:** To change user & group of a folder
- **chown -R user:group foldername:** To change user & group of a folder along with files.
- **chown user:group foldername/*:** To change user & group of a files which are present in folder.

CHANGING PERMISSIONS OF A FILE

- **chmod 777 filename:** To change permissions of a file
- **chmod 542 f1 f2 f3:** To change permissions of a multiple files
- **chmod 123*:** To change permissions of all files
- **chmod 561 folder:** To change permissions of a folder
- **chmod -R 777 foldername:** To change permissions of a folders along with files.
- **chmod 345 foldername/*:** To change permissions of a files inside the folder