Linux Basic Commands

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1. Basic commands

```
#mkdir = create folder
#mkdir /foldername = create folder in /
#rmdir = empty folder delete
#rm -rf foldername = delete any folder
#rm filename = delete file
#date = show date
#time = show time
#cd .. = change directory
#pwd = show path
#ls = list directory
#ls -a = show hidden file
#touch = create blank file
#history = show commands history
#history -c = clear commands history #cal = show calander
#cal anyyear = show year calander
#useradd username = add user
#passwd username = set user password
#userdel username = delete user account
#userdel -r username = delete user account with all files
#su - username = login user in terminal
#useradd -s /sbin/nologin username = create user with nologin
#usermod = changes in already create user
#useradd -u 2000 username = create user with any user ID (2000,1500,3000etc.)
#groupadd groupname = create group
#useradd -G groupname username = create user (add in group)
#usermod -G groupname username = user add in group(already create user account)
#usermod -I newname oldname = change user login name
#usermod -c "add comment" username = add comment in user
#cat = show file
#Is -Id /foldername = show folder permission
#chmod 770 /foldername = give permission to folder
4=read
2=write
1=execute
#chgrp groupname /foldername = give group ownership
#vim filename = edit file in terminal
#cp /copyfilelocation /savefilelocation= copy file
```

```
example :- cp /etc/fstab /var/tmp
#getfacl filename = show advance permission
#setfacl -m u:username:rwx filename = set advanced permission
r = read
w = write
x = execute
- = give no permission
compresse file #du -sh /filename = show folder size
#tar -cvf newname.tar /foldername = compresse in tar
#bzip2 newname.tar = compresse in bzip2
#gzip newname.tar = compresse in gzip
#xz newname.tar = compresse in xz
```

2. Text handling

```
#mkdir - make directories
Usage: mkdir [OPTION] DIRECTORY...
eg. mkdir soni
2. #ls – list directory contents
Usage: Is [OPTION]... [FILE]...
eg. Is, Is I,
Is prabhat
3.#cd – changes directories
Usage: cd [DIRECTORY]
eg. cd soni
4.#pwd print
name of current working directory
eg. pwd
5.#vim – Vi Improved, a programmers text editor
Usage: vim [OPTION] [file]...
eg. vim file.txt
6.#cp - copy files and directories
Usage: cp [OPTION]... SOURCE DEST
eg. cp sample.txt sample copy.txt
7.#mv - move (rename) files
Usage: mv [OPTION]... SOURCE DEST
```

eg. mv old.txt new.txt

8.#rm remove files or directories

Usage: rm [OPTION]... FILE...

eg. rm file1.txt, rm rf

9.#find – search for files in a directory hierarchy

Usage: find [OPTION] [path] [pattern]

eg. find file1.txt, find name

file1.txt

10.#history – prints recently used commands

Usage: history

3. system administration

11.#chmod – change file access permissions

Usage: chmod [OPTION] [MODE] [FILE]

eg. chmod 744 calculate.sh12.#chown – change file owner and group

Usage: chown [OPTION]... OWNER[:(GROUP)] FILE...

eg. chown remo myfile.txt

13.#su – change user ID or become superuser

Usage: su [USERNAME] [LOGIN]

eg. su remo, su

14.#passwd – update a user's authentication tokens(s)

Usage: passwd [USER NAME]

eg. passwd

15.#who – show who is logged on

Usage: who [OPTION]

eg. who, who d

4. Text Processing

16.#cat – concatenate files and print on the standard output

Usage: cat [OPTION] [FILE]...

eg. cat file1.txt17.#echo – display a line of text

Usage: echo [OPTION] [string] ...

eg. echo hello friends

18.#grep - print lines matching a pattern

Usage: grep - [OPTION] PATTERN [FILE]...
eg. grep i apple sample.txt

19.#wc - print the number of newlines, words, and bytes in files
Usage: wc - [OPTION]... [FILE]...
eg. wc file1.txt
wc L file1.txt
20.#sort - sort lines of text files
Usage: sort [OPTION]... [FILE]...
eg. sort file1.txt

5. **Process Management21**.#ps – report a snapshot of the current processes

Usage: ps [OPTION]

eg. ps, ps el22.#kill – to kill a process(using signal mechanism)

Usage: kill [OPTION] pid

eg. kill 9 2275

23.#bg - make a foreground process to run in background

Usage: type 'ctrl+z' and then 'bg '

24.#fg – to make background process as foreground process

Usage: fg [jobid]

25.#jobs – displays the names and ids of background jobs

Usage: jobs

6. Archival

26.#tar – to archive a file Usage: tar [OPTION] DEST SOURCE

eg. tar cvf

/home/archive.tar /home/original

tar xvf /home/archive.tar27.#zip – package and compress (archive) files

Usage: zip [OPTION] DEST SOURSE

eg. zip original.zip original

28.#unzip – list, test and extract compressed files in a ZIP archive

Usage: unzip filename eg. unzip original.zip

7. Network

```
29.#ping - ping desktop
eg. ping desktopX.example.com30.#ssh – SSH client (remote login program)
"ssh is a program for logging into a remote machine and for
executing commands on a remote machine"
Usage: ssh [options] [user]@hostname
eg. ssh X guest@10.105.11.20
31.#scp – secure copy (remote file copy program)
"scp copies files between hosts on a network"
Usage: scp [options] [[user]@host1:file1] [[user]@host2:file2]
eg. scp file1.txt guest@10.105.11.20:~/Desktop/
```

8. File Systems

```
32.#fdisk – partition manipulator
eg. sudo fdisk -l33.#mount – mount a file system
Usage: mount -t type device dir
eg. mount /dev/sda5 /media/target
34.#umount – unmount file systems
Usage: umount [OPTIONS] dir | device...
eg. umount /media/target
35.#du – estimate file space usage
Usage: du [OPTION]... [FILE]...
eg. du
36.#df – report filesystem disk space usage
eg. df -h
37.#quota – display disk usage and limits
Usage: quota [OPTION]
eg. quota v
```

9. Advanced Commands

```
38.#reboot – reboot the system
Usage: reboot [OPTION]
eg. reboot39.#poweroff – power off the system
Usage: poweroff [OPTION]
eg. poweroff
40.#sed stream
```

editor for filtering and transforming text Usage: sed [OPTION] [inputfile]... eg. sed 's/love/hate/g' loveletter.txt 41.#awk pattern scanning and processing language

eg. awk F: '{ print \$1 }' sample_awk.txt
42.#locate – find or locate a file
Usage: locate [OPTION]... FILE...
eg. locate file1.txt