

# Linux Operating System

## ★ Imp Commands -

- ① `who am i`
- ② `Pwd` - Present Working Directory.

★ If you are going to start a new project then you have to create a new directory so for that we use -

- ③ `mkdir` - Making Directory, `mkdir "My App"`
- ④ `ls` - List down the content.
- ⑤ `cd` - change Directory.
- ⑥ `cd ..` - To went Back.
- ⑦ `touch` - To create a Empty File.
- ⑧ `rm` - Remove File.
- ⑨ `Cat` - create and Read Files / `cat > file1`.
- ⑩ `echo` This is test file.
- ⑪ `ctrl + D` - Exit from the File ↗
- ⑫ `rm -r (directory name)` - To Delete Directory.

★ If you have to edit the file you need to install Vi editor for that create new directory 1st

`mkdir linuxproject`  
`cd linuxproject` `ls` → `Pwd`  
`xi / vim`

- ⑬ `sudo apt install` - Packages Installed in Debian

★ If you have to create a new file through Vi editor editor then -

- ⑭ `vi config.yaml` — `cat filename`  
Enter `J`

`Esc` - for Command mode

★ `!Wq!` - forcefully write and quit from vi editor



★ echo mango.  
★ echo Apple > fruits.txt, — overwrite,  
    >> — append - Add extra

Print these

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- ⑭. `DD` - Cut the line in vi Editor.
- ⑮. `sed - 's/yash/Yash/' -i Config.yaml`  
use to edit in vi editor
- ⑯. Cat Command is use to Reading the ~~less~~ Content in the file. (small size).
- ⑰. `more` - use to Reading the content in the file.
- ⑱. `less` - same like `more` | `head -n 5 file1.txt`.
- ⑲. `head` - To see Top 10 lines.
- ⑳. `tail` - To checking out the content from the bottom.
- ㉑. `tail -f /var/log/syslog` - for active logs
- ㉒. `sort filename` - for sorting out (a-z) } use in editor to arrange
- (z-a) `sort -r` — for Reverse sorting.
- ㉓. `-help sort`
- ㉔. `man sort`
- ㉕. History - To check all past commands.
- ! 25. - To Run the Command from history
- ㉖. `tar -czvf Config.yaml tar.gz Config.yaml`  
To compress the file in the zip folder



27. `grep` - filter out the content.

The word ~~eg~~ `grep` Linux config.yaml File name  
 which you want to find  
`grep -i` - जेदा आवाजवा मारी नसरी की 1st letter capital auré ki small.

\* 28. `mount /dev/xvda /` - `sudo fdisk -l`  
Umount. `mnt /test`

29. `sudo apt list` - To display all packages.

30. `sudo apt update` and `sudo apt upgrade`  
 & &

31. `apt`  
`sudo apt install nmap` - To install any software  
`sudo apt remove nmap` - To uninstall.

32. `id` , `id root`.

33. `sudo cat /etc/passwd` - It contains all the user name

less than ★ Linux has two types of user name  
 $1000 <$  ① system user - use for automation work.  
 $1000 >$  ② Normal user - use for logging purpose

34. `sudo cat /etc/group` - stored all user's group.

35. `sudo /etc/shadow` - To stored user's Password's.

starting with d - means directory  
- means file.

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36. Sudo adduser ubuntu

★ To create a new user - Pass. ————

yash 25/7/26

37. Sudo cat /etc/passwd

38. Su ubuntu <sup>use</sup> - To switch the user

★ Sudo passwd ubuntu - To reset the password

39. Sudo usermod -l ubuntu ubuntony.

New user

old user

This command is used to modify the user name

40. Sudo deluser yash <sup>TO</sup> - Remove the user

user

~~ex~~ sudo cat /etc/passwd

41. Sudo passwd ubuntu (username)

42. Sudo chown ubuntu : yash File1.

★ For changing the ownership of the file

others.

Ex.

-rwx-rwx-r-- 1. yash yash 4096 July 6 File1.  
-rwx-x                    ↑                    ↑                    ↑                    ↑                    ↑  
Read, Write, Execute owner group File size date File name

43. Ps aux - Active processes in linux system

44. sleep 10 &

Ps aux | grep sleep.

kill 8063 - Process id



\* linux administrator

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→ htop → same  
\* Top - linux task manager

45 \* sudo systemctl status sshd  
\* service management utility.

46 df -h - display disk storage  
free -h

47 uname -a - display system info.

Imp.  
for cloud and devops

\* ifconfig - Display All Interface Networks.

\* ip a - Advance Command of ifconfig

\* Ping 8.8.8.8 } To check the connectivity.

\* { traceroute 8.8.8.8 } Troubleshooting Command for connection  
tracert

\* netstat -en - To display gateway address

\* ssh username@ip

Net protocol that helps to connect remote servers.

Imp.

\* Curl - Data transfer over various Network protocols.

\* Curl https://example.com

\* Curl -v -k https://example.com

\* Curl -v -k https://example.com -x proxy:ip:port



-- amend - To store

\* Wget - ~~to~~ download file from the internet

\* Journactl -u sshd - display service logs  
play ① → ②.

\* dmesg - display Buffer messages from the kernel  
sudo

ex. sudo dmesg | grep -i "Network"

\* Attributes.

① LS - ls -l, ls -al, ls -le, ls -lh, ls -lt.

② cat - cat > yash, cat >> yash >> fl.txt

cat -n fl.txt

③ head -n 20 fl.txt, same tail -n 20 fl.txt

only  
File

④ cp contact.txt contact.list.txt

Folder  
⑤ cp -r practice folder demoapp

⑥ cp fruits.txt /~~users~~ desktop / SET with satin  
demo.txt.

⑦ move file / desktop / SET with satin

⑧ mv "fruits - copy.txt" fruits101.txt

⑨ grep -i yash names.txt

grep -i yash \* .txt. — file name  
જોઈતો ફાઈલ નામો શોધી શકાય.

<sup>imp</sup> \* grep - search → content inside file  
\* find - search → file / folder in a directory.

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⑩ grep -ci yash ~~txt~~ \*.txt

11 grep -v yash names.txt — Inversion

⑫ grep (-A) 2 -i "sagar" names.txt

(-B)  
(-C) → Global Regular expression point (grep)

⑬ find . -name "\*.java"

⑭ find . -name "see"

find . -type d

find . -type f

find . -name "

⑮ wc MyFile.txt — To count size of file.  
Word Count — OR To see the diff bet 3 or more file.

⑯ In hardlink file / Path address.

⑰ In -s / copy and paste path and file name

\* echo "Hello dosto, this is soft link" >  
devops-file.txt.



\* sudo cr is yash ← is command operate through yash command

\* sudo em yash

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\* > - overwrite

\* >> - Append

\* Hard link - original file delete after hard link file  
shortcut valid until file

In duplicate.txt hard link - file.txt  
file name

\* Soft link - main file delete soft link not delete

In -s original.txt o-soft link - file.txt  
← soft link

\* cut -b 1-4 myFile.txt

File में 1 से लेकर 4 तक Byte's cut करके देगा।

\* tee - use to print on the screen as well as we can  
\* echo "hello" | tee hello.txt. print it in the file also.

\* diff - use to see the difference bet<sup>n</sup> two files.

\* diff demo.txt newFile.txt

Recursively.

\* Zip -r demo.zip demoFile.txt