

- 1) Commands:
- i) `mkdir New`
 - ii) `mkdir New/a`
 - iii) `mkdir -p New1/a`
 - iv) `mkdir -p New1/{a,b}`
 - v) `ls New1`

Uses:

- i) Creates a new directory named New in the current working dir.
- ii) Tries to create a subdirectory inside New
- iii) Creates the directory New1 and the subdirectory a inside it.
- iv) Create two subdirectories name a and b inside New1

Output: New1/

```
├ a/
└ b/
```

v) Lists the contents inside the New1 directory.

Output

a b

- 2) Command: `ls /`

Uses: Lists all the top level directories and files in the root directory

Output:

```

bin  dev  initrd.img  lost+found  media  mnt  opt  run  sys  var  vmlinuz
boot etc  lib         media       proc  root  sbin  srv  tmp  user
cdrom home lib64      mnt         root

```

- 3) Commands:
- i) `cat > win.txt`
 - ii) `ls * win.txt`
 - iii) `ls *. *`
 - iv) `ls New1/ * win.txt`
 - v) `ls New1/ *. *`

Uses:

- i) Creates a new file named win.txt or overwrites it if it exists
- ii) Lists all files in the current directory whose names end with win.txt.
- iii) Lists all files that have a dot in their names that is files with extension.
- iv) Lists all files inside the directory New1 directory that end with win.txt
- v) Lists all files inside the New1 directory that have a dot in the filename.

Output: i) Man is mortal → Ctrl C

- ii) win.txt
 iii) examples.desktop win.txt
 iv) & v) ls: cannot access New1/*.*. No such directory.

4) Command: ls -s

Uses: Display the file size alongside the file names in the current directory.

Output: total 60

4 Desktop	12 examples.desktop	4 New1	4 Sujal	4 win.txt
4 Document	4 Music	4 Pictures	4 Templates	
4 Downloads	4 New	4 Public	4 Videos	

5) Command: ls -d*/

Uses: Lists only the directories in the current directory without showing their contents

Output: ~~total 32~~

~~drwxr-xr-x 20 student3~~

~~drwxr-xr-x 3~~

~~rw-r--r-- 1~~

Documents/Music/Videos/Downloads/Desktop/Pictures/Sujal

6) Command: ls -al

Uses: Displays a detailed list of all files and directories, including hidden ones in the current directory.

Output: total 132

drwxr-xr-x	20	student3	student3	4096	Jul 26	10:18
drwxr-xr-x	3	root	root	4096	Jul 22	14:19
rw-r--r--	1	student3	student3	174	Jul 26	10:11

7) Command: ls -a

Uses: List all the files and directories, including hidden ones, in the current directory.

Output:

..	.config	examples.desktop	New	Templates
..	.dbus	.gnome	New1	win.txt
..	.bash-histor	Desktop	Public	Videos

8) Command: `ls ..`

Uses: It lists the contents of the parent directory of our current working directory

Output: student3

9) Command: `ls ../..`

Uses: It lists the contents of the grandparent directory, which is two level up.

Output:

bin	dev	incoming	lost+found	opt	run	var
boot	etc	lib	media	proc	sbin	vblinux
cdrom	home	lib64	mnt	mnt	srv	

10) Command: `ls -l`

Uses: Lists all the directory in detailed

Output:

..	config	examples	desktop	New	templates
..	dbus	.gnome		New	videos
.bashhistory		.dmrc		Desktop	Documents
Public	videos	win.txt		Sujal	Music

11) Command: `ls -ls`

Uses: Shows a long listing of files along with their disk space

Output: total 60

4 drwxr-xr-x	2	student3	student3	4096	Jul 22 14:21	Desktop
4 drwxr-xr-x	2	student3	student3	4096	Jul 22 14:21	Desktop
4 drwxr-xr-x	2	student3	student3	4096	Jul 22 14:20	Documents

12) Command: `rmdir New`

Uses: Remove the given directory

13) Command: `date`

Uses: Display the current date & time

Output: Sat Jul 26 12:31:14 IST 2025

- 14) Command: `bc`
Uses: "Bash calculator" used for arithmetic operations.
Output:
`a=5`
`b=9`
`b-a`
`4`
`b+a`
`14`
- 15) Command: `cat > rabbit.txt`
Uses: Creates a new file `rabbit.txt`
Output:
`She is the one`
`Have a good day`
`Good Morning`
`^C`
- 16) Command: `wc -w rabbit.txt`
Uses: Counts the number of words in the file `rabbit.txt`
Output: `10 rabbit.txt`
- 17) Command: `wc -l rabbit.txt`
Uses: Counts the number of lines in the file `rabbit.txt`
Output: `3 rabbit.txt`
- 18) Command: `head -2 rabbit.txt`
Uses: Displays the first two lines of the file `rabbit.txt`
Output: `she is the one`
`Have a good day`
- 19) Command: `tail -2 rabbit.txt`
Uses: Displays the last two lines of the file
Output: `Have a good day`
`Good Morning`

20) Command: cat > dj.txt
Uses: Creates a new file dj.txt

Output:

ludo rainbow squad computer
 bottle sky pond hand
 hello why memory
 dress world
 forever
 ^C

21) Commands : i) grep "computer" dj.txt
 ii) grep "why" dj.txt
 iii) grep -i "dress" dj.txt
 iv) grep -n "sky" dj.txt
 v) grep -c "forever" dj.txt

Uses: i) Searches for the word "computer" in the file dj.txt
 ii) Searches for the word "why" in the file dj.txt
 iii) Searches for the word "dress" in the file dj.txt without caring case
 iv) Searches for the word "sky" in the file dj.txt and display the line no.
 v) Counts the number of lines in the file that contains "forever".

Output: i) ludo rainbow squad computer
 ii) hello why memory
 iii) dress world
 iv) 2: bottle sky pond hand
 v) 1.

22) Command: sort > sg.txt
uses: Sorts the line alphabetically.

Output:

gaining knowledge
 inventing
 learning
 spreading positivity

23) Commands: i) touch dg.txt

ii) ls -l dg.txt

Uses: i) Creates an empty file dg.txt if it doesn't exist

ii) Displays detailed info about the file dg.txt.

Output: -rw-rw-r-- 1 student3 student3 0 Jul 26 16:30 dg.txt

24) Commands: i) chmod u+x dg.txt

ii) ls -l dg.txt

Uses: Changes mode of the file dg.txt and displays detailed info.

Output: -rw-r--x 1 student3 student3 0 Jul 26 16:30 dg.txt

25) Command: cal

Uses: Displays current month's calendar

Output: July 2025

Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

26) Command: echo "Hello"

Uses: Prints text on terminal

Output: Hello

27) Command: ~~cat~~ cp sa.txt gg.txt

Uses: Transfers contents of a file to another file.

Output: sa.txt → become empty

gg.txt → He
she
Her

28) Command: rm -r gg.txt

Uses: Removes the file on directory named "gg.txt" recursively.

Output: gg.txt removed recursively

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