Operating System

Semester 4

Practical-1 Application of Shell Commands

1. cd

```
bharat_patel@DESKTOP-9M8H42R:~$ cd /mnt/e/Tanvi
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ ls
Asiignment  Certificate  Dev-Cpp  OS.txt  T-sem4
```

2. ls

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ ls
Asiignment  Certificate  Dev-Cpp  OS.txt  T-sem4  example.txt  gmon.out  lpass.txt  pp1.csv  z-documents
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ ls -l
total 20
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 25 10:30 Asiignment
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 25 23:14 Certificate
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Dec 21  2022 Dev-Cpp
-rwxrwxrwx 1 bharat_patel bharat_patel    79 Feb  2 20:34 OS.txt
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 20 17:15 T-sem4
-rwxrwxrwx 1 bharat_patel bharat_patel    81 Feb  3 09:01 example.txt
-rwxrwxrwx 1 bharat_patel bharat_patel  4364 Sep 29 00:25 gmon.out
-rwxrwxrwx 1 bharat_patel bharat_patel   160 May 10  2023 lpass.txt
-rwxrwxrwx 1 bharat_patel bharat_patel 10436 Jun  4  2023 pp1.csv
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Dec 22 17:53 z-documents
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ ls -a
.  ..  Asiignment  Certificate  Dev-Cpp  OS.txt  T-sem4  example.txt  gmon.out  lpass.txt  pp1.csv  z-documents
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

3. echo

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ echo Tanvi
Tanvi
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ echo -n Tanvi
Tanvibharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

4. cat

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat example.txt
This is an example file for OS Shel Comands
To run that commands in the Linux
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat -b example.txt
     1  This is an example file for OS Shel Comands
     2  To run that commands in the Linux
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat -E example.txt
$his is an example file for OS Shel Comands
$o run that commands in the Linux
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

5. pwd

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ pwd
/mnt/e/Tanvi
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

6. mkdir

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ mkdir NEW-DOCUMENT
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ ls -l
total 20
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 25 10:30 Asiignment
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 25 23:14 Certificate
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Dec 21  2022 Dev-Cpp
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Feb  3 22:55 NEW-DOCUMENT
-rwxrwxrwx 1 bharat_patel bharat_patel    79 Feb  2 20:34 OS.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    81 Feb  3 10:10 OS.txt.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    79 Feb  3 10:14 OS1.txt
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 20 17:15 T-sem4
-rwxrwxrwx 1 bharat_patel bharat_patel    34 Feb  3 12:52 eg.txt
-rwxrwxrwx 1 bharat_patel bharat_patel  4364 Sep 29 00:25 gmon.out
-rwxrwxrwx 1 bharat_patel bharat_patel   160 May 10  2023 lpass.txt
-rwxrwxrwx 1 bharat_patel bharat_patel 10436 Jun  4  2023 pp1.csv
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Dec 22 17:53 z-documents
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

7. who

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ who

bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ who -b
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ who -q

# users=0
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ who -a
```

8. rmdir

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ rmdir NEW-DOCUMENT
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ ls -l
total 20
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 25 10:30 Asiignment
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 25 23:14 Certificate
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Dec 21  2022 Dev-Cpp
-rwxrwxrwx 1 bharat_patel bharat_patel    79 Feb  2 20:34 OS.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    81 Feb  3 10:10 OS.txt.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    79 Feb  3 10:14 OS1.txt
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 20 17:15 T-sem4
-rwxrwxrwx 1 bharat_patel bharat_patel    34 Feb  3 12:52 eg.txt
-rwxrwxrwx 1 bharat_patel bharat_patel  4364 Sep 29 00:25 gmon.out
-rwxrwxrwx 1 bharat_patel bharat_patel   160 May 10  2023 lpass.txt
-rwxrwxrwx 1 bharat_patel bharat_patel 10436 Jun  4  2023 pp1.csv
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Dec 22 17:53 z-documents
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

9. cp

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat OS.txt
This is an example file for OS Shel Comands
To run that commands in the Linux bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cp OS.txt OS1.txt
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat OS1.txt
This is an example file for OS Shel Comands
To run that commands in the Linux bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cp -i OS.txt file.txt
cp: overwrite 'file.txt'? y
```

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cp -v OS.txt file1.txt
'OS.txt' -> 'file1.txt'
```

10. mv

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ sudo su
[sudo] password for bharat_patel:
root@DESKTOP-9M8H42R:/mnt/e/Tanvi# mv eg1.txt /Assignment
root@DESKTOP-9M8H42R:/mnt/e/Tanvi# mv file.txt /Asiignment
root@DESKTOP-9M8H42R:/mnt/e/Tanvi#
```

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ mv eg.txt /Asiignment
mv: inter-device move failed: 'eg.txt' to '/Asiignment'; unable to remove target: Permission denied
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ mv OS1.txt file4.txt
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat file4.txt
This is an example file for OS Shel Comands
To run that commands in the Linux bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

11. rm

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ rm example.txt
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ rm -i eg1.txt
rm: remove regular empty file 'eg1.txt'? n
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ ls -l
total 20
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 25 10:30 Asiignment
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 25 23:14 Certificate
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Dec 21  2022 Dev-Cpp
-rwxrwxrwx 1 bharat_patel bharat_patel    79 Feb  2 20:34 OS.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    81 Feb  3 10:10 OS.txt.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    79 Feb  3 10:14 OS1.txt
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 20 17:15 T-sem4
-rwxrwxrwx 1 bharat_patel bharat_patel    34 Feb  3 12:52 eg.txt
-rwxrwxrwx 1 bharat_patel bharat_patel  4364 Sep 29 00:25 gmon.out
-rwxrwxrwx 1 bharat_patel bharat_patel   160 May 10  2023 lpass.txt
-rwxrwxrwx 1 bharat_patel bharat_patel 10436 Jun  4  2023 pp1.csv
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Dec 22 17:53 z-documents
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

12. cmp

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cmp OS.txt OS1.txt
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cmp OS.txt eg.txt
OS.txt eg.txt differ: byte 1, line 1
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cmp -b OS.txt eg.txt
OS.txt eg.txt differ: byte 1, line 1 is 124 T 110 H
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat OS.txt
This is an example file for OS Shel Comands
To run that commands in the Linux bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat eg.txt
Hello
HOw are you
Are you okay
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat OS1.txt
This is an example file for OS Shel Comands
To run that commands in the Linux bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

13. chmod

```
root@DESKTOP-9M8H42R:/mnt/e/Tanvi# chmod u=rwx,g=rw,o=r eg.txt
root@DESKTOP-9M8H42R:/mnt/e/Tanvi# ls -l
total 20
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 25 10:30 Asiignment
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 25 23:14 Certificate
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Dec 21  2022 Dev-Cpp
-rwxrwxrwx 1 bharat_patel bharat_patel    81 Feb  3 10:10 OS.txt.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    79 Feb  3 10:14 OS1.txt
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 20 17:15 T-sem4
-rwxrwxrwx 1 bharat_patel bharat_patel    34 Feb  3 12:52 eg.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    79 Feb  2 20:34 file1.txt
lrwxrwxrwx 1 bharat_patel bharat_patel     6 Feb  3 23:03 file2.txt -> OS.txt
-rwxrwxrwx 1 bharat_patel bharat_patel   134 Feb  3 23:11 fruits.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    68 Feb  3 23:28 fruits1.txt
-rwxrwxrwx 1 bharat_patel bharat_patel  4364 Sep 29 00:25 gmon.out
-rwxrwxrwx 1 bharat_patel bharat_patel   160 May 10  2023 lpass.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    67 Feb  3 23:14 numbers.txt
-rwxrwxrwx 1 bharat_patel bharat_patel 10436 Jun  4  2023 pp1.csv
-rwxrwxrwx 1 bharat_patel bharat_patel    91 Feb  3 23:00 wcapp.txt
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Dec 22 17:53 z-documents
root@DESKTOP-9M8H42R:/mnt/e/Tanvi#
```

14. chown

```
root@DESKTOP-9M8H42R:/mnt/e/Tanvi# ls -l
total 20
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 25 10:30 Asiignment
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 25 23:14 Certificate
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Dec 21  2022 Dev-Cpp
-rwxrwxrwx 1 bharat_patel bharat_patel    81 Feb  3 10:10 OS.txt.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    79 Feb  3 10:14 OS1.txt
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 20 17:15 T-sem4
-rwxrwxrwx 1 bharat_patel bharat_patel    34 Feb  3 12:52 eg.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    79 Feb  2 20:34 file1.txt
lrwxrwxrwx 1 bharat_patel bharat_patel     6 Feb  3 23:03 file2.txt -> OS.txt
-rwxrwxrwx 1 bharat_patel bharat_patel   134 Feb  3 23:11 fruits.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    68 Feb  3 23:28 fruits1.txt
-rwxrwxrwx 1 bharat_patel bharat_patel  4364 Sep 29 00:25 gmon.out
-rwxrwxrwx 1 bharat_patel bharat_patel   160 May 10  2023 lpass.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    67 Feb  3 23:14 numbers.txt
-rwxrwxrwx 1 bharat_patel bharat_patel 10436 Jun  4  2023 pp1.csv
-rwxrwxrwx 1 bharat_patel bharat_patel    91 Feb  3 23:00 wcapp.txt
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Dec 22 17:53 z-documents
root@DESKTOP-9M8H42R:/mnt/e/Tanvi# chown root eg.txt
root@DESKTOP-9M8H42R:/mnt/e/Tanvi# ls -l
total 20
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 25 10:30 Asiignment
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 25 23:14 Certificate
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Dec 21  2022 Dev-Cpp
-rwxrwxrwx 1 bharat_patel bharat_patel    81 Feb  3 10:10 OS.txt.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    79 Feb  3 10:14 OS1.txt
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Jan 20 17:15 T-sem4
-rwxrwxrwx 1 bharat_patel bharat_patel    34 Feb  3 12:52 eg.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    79 Feb  2 20:34 file1.txt
lrwxrwxrwx 1 bharat_patel bharat_patel     6 Feb  3 23:03 file2.txt -> OS.txt
-rwxrwxrwx 1 bharat_patel bharat_patel   134 Feb  3 23:11 fruits.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    68 Feb  3 23:28 fruits1.txt
-rwxrwxrwx 1 bharat_patel bharat_patel  4364 Sep 29 00:25 gmon.out
-rwxrwxrwx 1 bharat_patel bharat_patel   160 May 10  2023 lpass.txt
-rwxrwxrwx 1 bharat_patel bharat_patel    67 Feb  3 23:14 numbers.txt
-rwxrwxrwx 1 bharat_patel bharat_patel 10436 Jun  4  2023 pp1.csv
-rwxrwxrwx 1 bharat_patel bharat_patel    91 Feb  3 23:00 wcapp.txt
drwxrwxrwx 1 bharat_patel bharat_patel  4096 Dec 22 17:53 z-documents
root@DESKTOP-9M8H42R:/mnt/e/Tanvi#
```

15. ps

```
root@DESKTOP-9M8H42R:/mnt/e/Tanvi# ps
  PID TTY          TIME CMD
   53 pts/0    00:00:00 sudo
   54 pts/0    00:00:00 su
   55 pts/0    00:00:00 bash
   63 pts/0    00:00:00 ps
root@DESKTOP-9M8H42R:/mnt/e/Tanvi# ps -e
  PID TTY          TIME CMD
    1 ?        00:00:00 init
   16 tty1     00:00:00 init
   17 tty1     00:00:00 bash
   52 tty1     00:00:00 sudo
   53 pts/0    00:00:00 sudo
   54 pts/0    00:00:00 su
   55 pts/0    00:00:00 bash
   64 pts/0    00:00:00 ps
root@DESKTOP-9M8H42R:/mnt/e/Tanvi# ps -x
  PID TTY      STAT   TIME COMMAND
    1 ?        Ssl    0:00 /init
   16 tty1     Ss     0:00 /init
   52 tty1     S      0:00 sudo su
   53 pts/0    Ss     0:00 sudo su
   54 pts/0    S      0:00 su
   55 pts/0    S      0:00 bash
   65 pts/0    R      0:00 ps -x
root@DESKTOP-9M8H42R:/mnt/e/Tanvi#
```

16. kill

```
root@DESKTOP-9M8H42R:/mnt/e/Tanvi# ps
  PID TTY          TIME CMD
   53 pts/0    00:00:00 sudo
   54 pts/0    00:00:00 su
   55 pts/0    00:00:00 bash
   66 pts/0    00:00:00 ps
root@DESKTOP-9M8H42R:/mnt/e/Tanvi# kill 53
root@DESKTOP-9M8H42R:/mnt/e/Tanvi#
Session terminated, killing shell... ...killed.
Terminated
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ kill -l
 1) SIGHUP       2) SIGINT       3) SIGQUIT      4) SIGILL       5) SIGTRAP
 6) SIGABRT      7) SIGBUS       8) SIGFPE       9) SIGKILL     10) SIGUSR1
11) SIGSEGV     12) SIGUSR2     13) SIGPIPE     14) SIGALRM     15) SIGTERM
16) SIGSTKFLT   17) SIGCHLD     18) SIGCONT     19) SIGSTOP     20) SIGTSTP
21) SIGTTIN     22) SIGTTOU     23) SIGURG      24) SIGXCPU     25) SIGXFSZ
26) SIGVTALRM   27) SIGPROF     28) SIGWINCH    29) SIGIO       30) SIGPWR
31) SIGSYS      34) SIGRTMIN    35) SIGRTMIN+1  36) SIGRTMIN+2  37) SIGRTMIN+3
38) SIGRTMIN+4  39) SIGRTMIN+5  40) SIGRTMIN+6  41) SIGRTMIN+7  42) SIGRTMIN+8
43) SIGRTMIN+9  44) SIGRTMIN+10 45) SIGRTMIN+11 46) SIGRTMIN+12 47) SIGRTMIN+13
48) SIGRTMIN+14 49) SIGRTMIN+15 50) SIGRTMAX-14 51) SIGRTMAX-13 52) SIGRTMAX-12
53) SIGRTMAX-11 54) SIGRTMAX-10 55) SIGRTMAX-9  56) SIGRTMAX-8  57) SIGRTMAX-7
58) SIGRTMAX-6  59) SIGRTMAX-5  60) SIGRTMAX-4  61) SIGRTMAX-3  62) SIGRTMAX-2
63) SIGRTMAX-1  64) SIGRTMAX
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

17. wc

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ wc wcapp.txt
 4 16 91 wcapp.txt
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ wc -l wcapp.txt
4 wcapp.txt
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ wc -L wcapp.txt
50 wcapp.txt
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ wc -w wcapp.txt
16 wcapp.txt
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ wc -c wcapp.txt
91 wcapp.txt
```

18. ln

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ ln OS.txt file1.txt
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ ln -s OS.txt file2.txt
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat OS.txt
This is an example file for OS Shel Comands
To run that commands in the Linux bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat file1.txt
This is an example file for OS Shel Comands
To run that commands in the Linux bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat file2.txt
This is an example file for OS Shel Comands
To run that commands in the Linux bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ rm OS.txt
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat file1.txt
This is an example file for OS Shel Comands
To run that commands in the Linux bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat file2.txt
cat: file2.txt: No such file or directory
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

19. head/tail

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat fruits.txt
Apple
Banana
Guava
Promganete
Kiwi
Cherry
Orange
Pineapple
Dragon fruit
Cherry
Plum
Grapes
Jack Fruit
Cucumber
Pear

bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ head fruits.txt
Apple
Banana
Guava
Promganete
Kiwi
Cherry
Orange
Pineapple
Dragon fruit
Cherry
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ tail fruits.txt
Orange
Pineapple
Dragon fruit
Cherry
Plum
Grapes
Jack Fruit
Cucumber
Pear
```

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ head -n5 fruits.txt
Apple
Banana
Guava
Promganete
Kiwi
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

20.   sort

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ sort fruits.txt

Apple
Banana
Cherry
Cherry
Cucumber
Dragon fruit
Grapes
Guava
Jack Fruit
Kiwi
Orange
Pear
Pineapple
Plum
Promganete
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ sort -n numbers.txt
0
1
2
2
2
3
4
4
5
7
7
8
8
14
16
54
54
65
87
92
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ sort -r fruits.txt
Promganete
Plum
Pineapple
Pear
Orange
Kiwi
Jack Fruit
Guava
Grapes
Dragon fruit
Cucumber
Cherry
Cherry
Banana
Apple

bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

21. find

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ find fruits.txt
fruits.txt
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ find f*
file1.txt
file2.txt
fruits.txt
bharat_patel@DESKTOP-9M8H42R:~$ cd /mnt/e/Tanvi/T-sem4
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi/T-sem4$ find -user bharat_patel
.
./AWD
./CN
./DSA-2
./OS
./OS/SHELL COMMANDS.ppt
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi/T-sem4$
```

22. uniq

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ cat fruits1.txt
Apple
Banana
Guava
Guava
Guava
Promganete
Kiwi
Kiwi
Cherry
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ uniq fruits1.txt
Apple
Banana
Guava
Promganete
Kiwi
Cherry
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ uniq -d fruits1.txt
Guava
Kiwi
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ uniq -u fruits1.txt
Apple
Banana
Promganete
Cherry
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

23. grep

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ grep P fruits.txt
Promganete
Pineapple
Plum
Pear
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ grep -c P fruits.txt
4
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ grep -n P fruits.txt
4:Promganete
8:Pineapple
11:Plum
15:Pear
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```

24. write /wc

```
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ who
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ ls
Asiignment   Dev-Cpp     OS1.txt  eg.txt    file2.txt    fruits1.txt  lpass.txt   pp1.csv     z-documents
Certificate  OS.txt.txt  T-sem4   file1.txt  fruits.txt  gmon.out     numbers.txt  wcapp.txt
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$ wc fruits.txt
 16  17 134 fruits.txt
bharat_patel@DESKTOP-9M8H42R:/mnt/e/Tanvi$
```