

## Experiment No.: 3

### Aim

Familiarization of linux commands

### CO2

Perform system administration tasks

### Procedure

1.pwd-To print working directory

\$pwd

### Output Screenshot

```
student@t2:~$ pwd
/home/student
```

2.ls-Used to list the files and contents

\$ls

### Output Screenshot

```
student@t2:~$ ls
anagha  Documents  marvel2  Music  nandanars  Pictures  PycharmProjects  Templates  'Untitled 1.odt'
Desktop Downloads  marvels  nandana  nrs        Public    snap             trial     Videos
```

(a).ls-R-Detailed view of sub directory

\$ls-R

### Output Screenshot

```
student@t2:~$ ls -R
.:
anagha  Documents  marvel2  Music  nandanars  Pictures  PycharmProjects  Templates  'Untitled 1.odt'
Desktop Downloads  marvels  nandana  nrs        Public    snap             trial     Videos

./anagha:
anagha colours file file1 file2 mk1 mk2 mk3 test3 test4

./Desktop:
'Lab Experiment Template.docx'

./Documents:

./Downloads:
'Lab Experiment Template.docx'

./marvels:
avengers marks1 marks2

./Music:

./nandana:
file10.txt file1.txt file2.txt file3.txt file4.txt file5.txt file6.txt output.txt

./nandanars:
a.txt c.txt file2.txt file4.txt name1.txt name3.txt nrs2.txt output.txt
b.txt file1.txt file3.txt file5.txt name2.txt nrs1.txt nrs.txt profile
```

(b).ls-l-long listing of contents

\$ls

## Output Screenshot

```
student@t2:~$ ls -l
total 320
drwxrwxr-x 2 student student 4096 Mar 10 12:51 anagha
drwxr-xr-x 2 student student 4096 Mar 13 11:18 Desktop
drwxr-xr-x 2 student student 4096 Jun 17 2022 Documents
drwxr-xr-x 2 student student 4096 Mar 7 16:37 Downloads
-rw-rw-r-- 1 student student 67 Mar 9 14:59 marvel2
drwxrwxr-x 2 student student 4096 Mar 7 17:01 marvels
drwxr-xr-x 2 student student 4096 Jun 17 2022 Music
drwxrwxr-x 2 student student 4096 Mar 6 12:57 nandana
drwxrwxr-x 2 student student 4096 Mar 13 12:29 nandanars
drwxrwxr-x 2 student student 4096 Mar 7 15:25 nrs
drwxr-xr-x 3 student student 4096 Mar 13 12:28 Pictures
drwxr-xr-x 2 student student 4096 Jun 17 2022 Public
drwxrwxr-x 3 student student 4096 Jun 17 2022 PycharmProjects
drwx----- 3 student student 4096 Jun 17 2022 snap
drwxr-xr-x 2 student student 4096 Jun 17 2022 Templates
drwxrwxr-x 2 student student 4096 Mar 10 13:03 trial
-rw-rw-r-- 1 student student 257831 Mar 7 16:33 'Untitled 1.odt'
drwxr-xr-x 2 student student 4096 Jun 17 2022 Videos
```

(c).ls-a-used to view hidden files

\$ls-a

## Output Screenshot

```
student@t2:~$ ls -a
.          .bash_logout Desktop  .gnupg  marvels  nandanars .profile .ssh      'Untitled 1.odt'
..         .bashrc    Documents .java   .mozilla nrs       Public  Templates Videos
anagha     .cache     Downloads .local  Music    Pictures  PycharmProjects .thunderbird
.bash_history .config    .gnome   marvel2 nandana  .pki     snap     trial
```

(d).ls-al-Detailed information can view along with hidden files.

\$ls-al

## Output Screenshot

```
student@t2:~$ ls -al
total 388
drwxr-xr-x 28 student student 4096 Mar 10 12:54 .
drwxr-xr-x 6 root root 4096 Jun 17 2022 ..
drwxrwxr-x 2 student student 4096 Mar 10 12:51 anagha
-rw----- 1 student student 6812 Mar 13 12:58 .bash_history
-rw-r--r-- 1 student student 220 Jun 17 2022 .bash_logout
-rw-r--r-- 1 student student 3771 Jun 17 2022 .bashrc
drwxrwxr-x 22 student student 4096 Mar 13 12:27 .cache
drwxr-xr-x 18 student student 4096 Mar 13 12:27 .config
drwxr-xr-x 2 student student 4096 Mar 13 11:18 Desktop
```

(e).ls-t-To list the files sorted in order of last modified.

\$ls-t

## Output Screenshot

```
student@t2:~$ ls -t
nandanars Desktop anagha marvels 'Untitled 1.odt' nandana snap Music Templates
Pictures trial marvel2 Downloads nrs PycharmProjects Documents Public Videos
```

3.mkdir-To make a new directory

\$ mkdir anagha

### Output Screenshot

```
student@t2:~$ mkdir anagha
```

```
student@t2:~$ ls
```

anagha	Documents	marvel2	Music	nandanars	Pictures	PycharmProjects	Templates	'Untitled 1.odt'
Desktop	Downloads	marvels	nandana	nrs	Public	snap	trial	Videos

4.cd-To navigate through directory we used cd

\$cd anagha

### Output Screenshot

```
student@t2:/home$ cd --
```

```
student@t2:~$ cd anagha
```

```
student@t2:~/anagha$ cd ..
```

```
student@t2:~$ cd anagha
```

5.cd.. or cd-- -To move one directory up

\$cd-- \$cd..

### Output Screenshot

```
student@t2:/home$ cd --
```

```
student@t2:~$ cd anagha
```

```
student@t2:~/anagha$ cd ..
```

```
student@t2:~$ cd anagha
```

6.history-To view the history and commands which we have been executed for a long time.

\$history

### Output Screenshot

```
student@t2:~/anagha$ history
```

1	./studio.sh
2	./studio.sh
3	su mca
4	pwd
5	ls
6	ls-R
7	ls -R
8	ls -l
9	ls -a
10	ls -al
11	ls -t
12	ls -r
13	history
14	man ls
15	mkdir nrs
16	pwd
17	cd nrs
18	pwd

7.man-We can learn & understand with different commands write from the shell using man commands.

\$manls

### **Output Screenshot**

```
student@t2:~/anagha$ man ls
student@t2:~/anagha$ cat > arunu
read
write
dance
sing
^Z
[1]+  Stopped                  cat > arunu
```

8.cat-To create a new file.

\$cat > file name

### **Output Screenshot**

```
student@t2:~/anagha$ cat > arunu
read
write
dance
sing
^Z
[1]+  Stopped                  cat > arunu
```

(a).cat filename-To display contents

\$cat filename

### **Output Screenshot**

```
student@t2:~/anagha$ cat arunu
read
write
dance
sing
```

(b).cat>>-To append content to the file

\$cat >> filename

### **Output Screenshot**

```
student@t2:~/anagha$ cat >> arunu  
  
eat  
drink  
^Z  
[3]+  Stopped                  cat >> arunu
```

(c).cat-n-To display the the line number

\$cat-n filename

### Output Screenshot

```
student@t2:~/anagha$ cat -n arunu  
 1 read  
 2 write  
 3 dance  
 4 sing  
 5 walk  
 6 run  
 7 smile  
 8  
 9  
10 eat  
11 drink
```

(d).cat-b-Removing the empty line numbering

\$cat-b

### Output Screenshot

```
student@t2:~/anagha$ cat -b arunu  
 1 read  
 2 write  
 3 dance  
 4 sing  
 5 walk  
 6 run  
 7 smile  
  
 8 eat  
 9 drink
```