

Experiment No :3

Aim: Familiarisation of Linux Commands

Procedure :

1. **Pwd** - Displays the absolute path name of the current directory.

\$ pwd

Output:

```
sobin@sobin-Virtual-Machine:~/Desktop$ pwd
/home/sobin/Desktop
```

2. **Ls** – To View the content of the Directory

\$ ls

Output:

```
sobin@sobin-Virtual-Machine:~$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  shared-drives  snap  Templates  Videos
sobin@sobin-Virtual-Machine:~$
```

3. **Ls -R** To list all the files in Subdirectory

\$ls -R

Output:

```
student@t2:~$ ls -R
.:
Desktop  Downloads  Pictures  PycharmProjects  sobin  Videos
Documents Music      Public    snap              Templates

./Desktop:

./Documents:

./Downloads:

./Music:

./Pictures:

./Public:
```

4. **Ls-l** Summarizes The Most Important Information About The File On A Single Line

```
$ls -l
```

Output:

```
student@t2:~$ ls -l
total 44
drwxr-xr-x 2 student student 4096 Mar  7 15:28 Desktop
drwxr-xr-x 2 student student 4096 Jun 17  2022 Documents
drwxr-xr-x 2 student student 4096 Jun 17  2022 Downloads
drwxr-xr-x 2 student student 4096 Jun 17  2022 Music
```

5. **Ls -a** To list all Hidden Files

```
$ ls -a
```

Output:

```
student@t2:~$ ls -a
.  .bash_history  .bashrc  .config  Documents  .gnupg  .local  Music  .pkg  Public  snap  .ssh  Videos
.. .bash_logout  .cache  Desktop  Downloads  .java  .mozilla  Pictures  .profile  PycharmProjects  sobin  Templates
```

6. **Ls -al** - To List the Files and directory with detailed Information such as size ,permission , date ,name.

```
$ ls -al
```

Output:

```
student@t2:~$ ls -al
total 112
drwxr-xr-x 21 student student 4096 Mar  7  2023 .
drwxr-xr-x  6 root      root    4096 Jun 17  2022 ..
-rw-r--r--  1 student student 15034 Mar  7 15:23 .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 19 student student 4096 Mar  7 14:09 .cache
drwxr-xr-x 18 student student 4096 Mar  7 14:12 .config
drwxr-xr-x  2 student student 4096 Mar  7 15:28 Desktop
drwxr-xr-x  2 student student 4096 Jun 17  2022 Documents
drwxr-xr-x  2 student student 4096 Jun 17  2022 Downloads
```

7. **Ls -t** List the files in sorted Order of last modified

```
$ls -t
```

Output:

```
student@t2:~$ ls -t
Pictures Desktop sobin PycharmProjects snap Documents Downloads Music Public Templates Videos
student@t2:~$
```

8. Ls-r -To List the files in Reverse Natural Order.

\$ls -r

Output:

```
student@t2:~$ ls -r
Videos Templates sobin snap PycharmProjects Public Pictures Music Downloads Documents Desktop
student@t2:~$
```

9. History – To Review the Command that have been previously executed for certain period of time.

\$ history

Output:

```
student@t2:~$ history
 1  ./studio.sh
 2  ./studio.sh
 3  su mca
 4  ls
 5  pwd
 6  mkdir sobin
 7  rmdir sobin
 8  pwd
 9  ls
10  cd desktop
11  cd Desktop
12  /
```

10.Man – To learn and understand the different Command right from the shell .

\$ man

Output:

```
LS(1) User Commands LS(1)
NAME
  ls - list directory contents
SYNOPSIS
  ls [OPTION]... [FILE]...
DESCRIPTION
  List information about the FILES (the current directory by default).  Sort entries alphabetically if none of -cftuvSUX nor --sort is specified.

  Mandatory arguments to long options are mandatory for short options too.

  -a, --all
      do not ignore entries starting with .

  -A, --almost-all
      do not list implied . and ..

  --author
      with -l, print the author of each file

  -b, --escape
      print C-style escapes for nongraphic characters

  --block-size=SIZE
      with -l, scale sizes by SIZE when printing them; e.g., '--block-size=M'; see SIZE format below

  -B, --ignore-backups
      do not list implied entries ending with ~

  -c
      with -lt: sort by, and show, ctime (time of last modification of file status information); with -l: show ctime and sort by name; otherwise: sort by ctime, newest first

  -C
      list entries by columns
```

11.Mkdir – To create new Directory

```
$ mkdir sample
```

Output:

```
student@t2:~/demo$ mkdir sample
student@t2:~/demo$ ls
sample
student@t2:~/demo$ cd sample
student@t2:~/demo/sample$ pwd
/home/student/demo/sample
student@t2:~/demo/sample$
```

12.Cd – cd command is used to change the directory

```
$ cd sample
```

Output:

```
student@t2:~/demo$ cd sample
student@t2:~/demo/sample$ pwd
/home/student/demo/sample
```

13.Cd .. -Used to change the directory to previous directory

```
$cd ..
```

Output:

```
student@t2:~/demo/sample$ pwd
/home/student/demo/sample
student@t2:~/demo/sample$ cd ..
student@t2:~/demo$ pwd
/home/student/demo
```

14.Rmdir -To remove the Directory.

```
$ rmdir sample
```

Output:

```
student@t2:~/demo$ rmdir demo
student@t2:~/demo$ cd demo
bash: cd: demo: No such file or directory
student@t2:~/demo$
```

15.Touch – used to create New file

```
$touch myfile.txt
```

```
$ls
```

Output:

```
student@t2:~/demo$ touch myfile
student@t2:~/demo$ ls
myfile
student@t2:~/demo$
```

16. Cat -Used to Display the content of the file.

```
$cat file1.txt
```

Output:

```
student@t2:~/demo$ cat file1.txt
hello
WELCOME
student@t2:~/demo$
```

17. cat > - Used to create a new file and Enter the contents to it's.

```
$cat > file1.txt
```

Output:

```
student@t2:~/demo$ cat > file1.txt
hello
WELCOME
student@t2:~/demo$ cat file1.txt
hello
WELCOME
student@t2:~/demo$
```

18. cat >> -Used to append the existing file content

```
$cat >> file1.txt
```

Output:

```
sobin@sobin-Virtual-Machine:~/Desktop$ cat file1.txt
hello
welcome
sobin@sobin-Virtual-Machine:~/Desktop$ cat >> file1.txt
net working
ajce
sobin@sobin-Virtual-Machine:~/Desktop$ cat file1.txt
hello
welcome
net working
ajce
```

19. Cat – To copy the content of the files to another file

```
$ cat file1.txt file2.txt >out.txt
```

Output:

```
sobin@sobin-Virtual-Machine:~/Desktop$ cat >file1.txt
Sunday
Monday
Tuesday
sobin@sobin-Virtual-Machine:~/Desktop$ cat> file2.txt
january
february
march
sobin@sobin-Virtual-Machine:~/Desktop$ cat file1.txt file2.txt >file.txt
sobin@sobin-Virtual-Machine:~/Desktop$ cat file.txt
Sunday
Monday
Tuesday
january
february
march
sobin@sobin-Virtual-Machine:~/Desktop$ □
```

20. Cat -n -Used to display the content of file with Line number

```
$cat -n file1.txt
```

Output:

```
sobin@sobin-Virtual-Machine:~/Desktop$ cat -n file1.txt
 1 Sunday
 2 Monday
 3 Tuesday
 4
 5 wednesday
 6 thursday
 7
 8 friday
sobin@sobin-Virtual-Machine:~/Desktop$ □
```

21.Cat -b -Used to display the content of file with Line number by removing number from empty line

```
$cat -b file2.txt
```

Output:

```
sobin@sobin-Virtual-Machine:~/Desktop$ cat -b file1.txt
 1 Sunday
 2 Monday
 3 Tuesday

 4 wednesday
 5 thursday

 6 friday
sobin@sobin-Virtual-Machine:~/Desktop$ □
```

22. Cat -for changing small letters to capital letters

```
$cat file.txt | tr a-z A-Z > outfile.txt
```

Output:

```
sobin@sobin-Virtual-Machine:~/Desktop$ cat file.txt | tr a-z A-Z > out.txt
sobin@sobin-Virtual-Machine:~/Desktop$ cat out.txt
SUNDAY
MONDAY
TUESDAY
JANUARY
FEBRUARY
MARCH
```