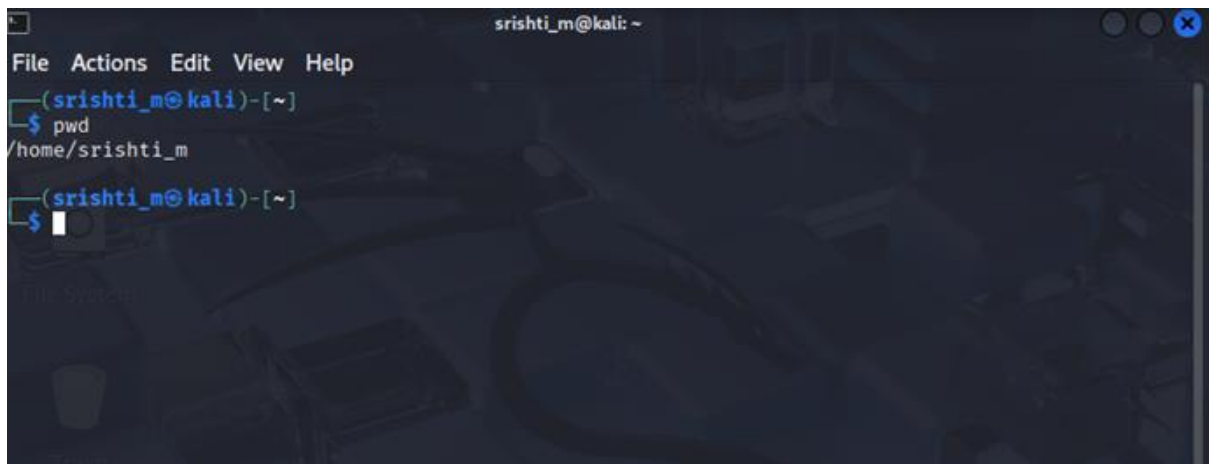


Experiment:- 2

Aim:- working with files and directories in linux

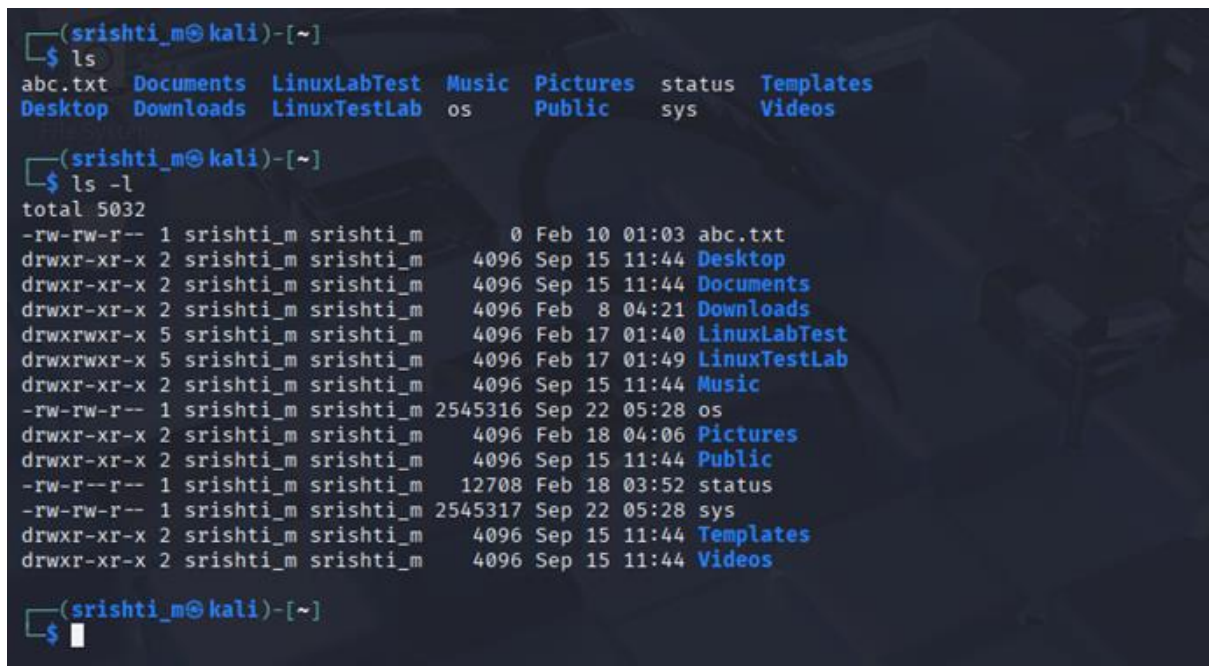
1. Log in to the Linux virtual machine.
2. Open the terminal.
3. Display the current directory.



A terminal window titled 'srishti_m@kali: ~' with a menu bar (File, Actions, Edit, View, Help). The prompt is '(srishti_m@kali)-[~]'. The user enters 'pwd' and the output is '/home/srishti_m'. The prompt is then '(srishti_m@kali)-[~]' with a cursor.

```
(srishti_m@kali)-[~]  
$ pwd  
/home/srishti_m  
  
(srishti_m@kali)-[~]  
$
```

4. List files and directories.



A terminal window titled 'srishti_m@kali: ~' with a menu bar (File, Actions, Edit, View, Help). The prompt is '(srishti_m@kali)-[~]'. The user enters 'ls' and the output is a list of files and directories. The prompt is then '(srishti_m@kali)-[~]' with a cursor. The user enters 'ls -l' and the output is a detailed list of files and directories.

```
(srishti_m@kali)-[~]  
$ ls  
abc.txt  Desktop  Documents  LinuxLabTest  Music  Pictures  status  Templates  
os       Public   sys        Videos  
  
(srishti_m@kali)-[~]  
$ ls -l  
total 5032  
-rw-rw-r-- 1 srishti_m srishti_m      0 Feb 10 01:03 abc.txt  
drwxr-xr-x 2 srishti_m srishti_m    4096 Sep 15 11:44 Desktop  
drwxr-xr-x 2 srishti_m srishti_m    4096 Sep 15 11:44 Documents  
drwxr-xr-x 2 srishti_m srishti_m    4096 Feb  8 04:21 Downloads  
drwxrwxr-x 5 srishti_m srishti_m    4096 Feb 17 01:40 LinuxLabTest  
drwxrwxr-x 5 srishti_m srishti_m    4096 Feb 17 01:49 LinuxTestLab  
drwxr-xr-x 2 srishti_m srishti_m    4096 Sep 15 11:44 Music  
-rw-rw-r-- 1 srishti_m srishti_m 2545316 Sep 22 05:28 os  
drwxr-xr-x 2 srishti_m srishti_m    4096 Feb 18 04:06 Pictures  
drwxr-xr-x 2 srishti_m srishti_m    4096 Sep 15 11:44 Public  
-rw-r--r-- 1 srishti_m srishti_m   12708 Feb 18 03:52 status  
-rw-rw-r-- 1 srishti_m srishti_m 2545317 Sep 22 05:28 sys  
drwxr-xr-x 2 srishti_m srishti_m    4096 Sep 15 11:44 Templates  
drwxr-xr-x 2 srishti_m srishti_m    4096 Sep 15 11:44 Videos  
  
(srishti_m@kali)-[~]  
$
```

5. Create a new directory.

```
(srishti_m@kali)-[~]  
$ mkdir linux_lab  
  
(srishti_m@kali)-[~]  
$ cd linux_lab  
  
(srishti_m@kali)-[~/linux_lab]  
$
```

6. Create files inside the directory.

```
(srishti_m@kali)-[~/linux_lab]  
$ touch file1.txt file2.txt  
  
(srishti_m@kali)-[~/linux_lab]  
$
```

7. Edit a file using nano.

```
(srishti_m@kali)-[~/linux_lab]  
$ nano file1.txt  
  
(srishti_m@kali)-[~/linux_lab]  
$
```

```
File Actions Edit View Help  
GNU nano 8.4 file1.txt *  
linux is powerful  
linux is open source  
linux is secure
```

- Vi file2.txt

```
(srishti_m@kali)-[~]
$ mkdir linux_lab2
(srishti_m@kali)-[~]
$ cd linux_lab2
(srishti_m@kali)-[~/linux_lab2]
$ touch file1.txt file2.txt
(srishti_m@kali)-[~/linux_lab2]
$ nano file1.txt
(srishti_m@kali)-[~/linux_lab2]
$ vi file2.txt
```



The screenshot shows a nano text editor window titled "srishti_m@kali: ~/linux_lab". The menu bar includes "File", "Actions", "Edit", "View", and "Help". The text content of the file is as follows:

```
linux is powerful
linux is open source
```

The left sidebar shows a file explorer view with icons for "Desktop", "Documents", and "Downloads".

- Display file contents: cat file1.txt

```
(srishti_m@kali)-[~/linux_lab2]
$ cat file1.txt
(srishti_m@kali)-[~/linux_lab2]
$
```

- Check file permissions:ls -l

```
(srishti_m@kali)-[~/linux_lab2]
$ cat file1.txt
(srishti_m@kali)-[~/linux_lab2]
$ ls -l
total 8
-rw-rw-r-- 1 srishti_m srishti_m  0 Feb 20 02:59 file1.txt
-rw-rw-r-- 1 srishti_m srishti_m 55 Feb 20 03:01 file1.txtn
-rw-rw-r-- 1 srishti_m srishti_m 51 Feb 20 03:07 file2.txt
(srishti_m@kali)-[~/linux_lab2]
$
```

- Change file permissions: `chmod 755 file1.txt`

```
(srishti_m@kali)-[~/linux_lab2]
$ ls -l
total 8
-rw-rw-r-- 1 srishti_m srishti_m 0 Feb 20 02:59 file1.txt
-rw-rw-r-- 1 srishti_m srishti_m 55 Feb 20 03:01 file1.txtn
-rw-rw-r-- 1 srishti_m srishti_m 51 Feb 20 03:07 file2.txt

(srishti_m@kali)-[~/linux_lab2]
$ chmod 755 file1.txt
```

- Verify updated permissions: `ls -l file1.txt`

```
(srishti_m@kali)-[~/linux_lab2]
$ chmod 755 file1.txt

(srishti_m@kali)-[~/linux_lab2]
$ ls -l file1.txt
-rwxr-xr-x 1 srishti_m srishti_m 0 Feb 20 02:59 file1.txt

(srishti_m@kali)-[~/linux_lab2]
$
```

Expected Output • Successful execution of basic Linux commands.

- Display of manual pages and help documentation.
- Identification of current system run level / target.
- Improved familiarity with Linux command usage.

Result Basic Linux system commands, run levels, and help utilities were successfully explored and executed. The student gained practical understanding of Linux command-line interaction and documentation mechanisms.