

# **OPERATING SYSTEM (203105204)**

## **LAB MANUAL**

## CERTIFICATE

*This is to certify that Mr./Ms. **Liza Bharatkumar Lad***  
*with enrolment no .2003031080087 has successfully completed his/her*  
*laboratory experiments in the **Operating System (203105204)** from the*  
*department of **.Information Technology** during the academic year **2020-***  
***2021***



Date of Submission: .....  
.....

Staff In charge:

Head of Department: .....

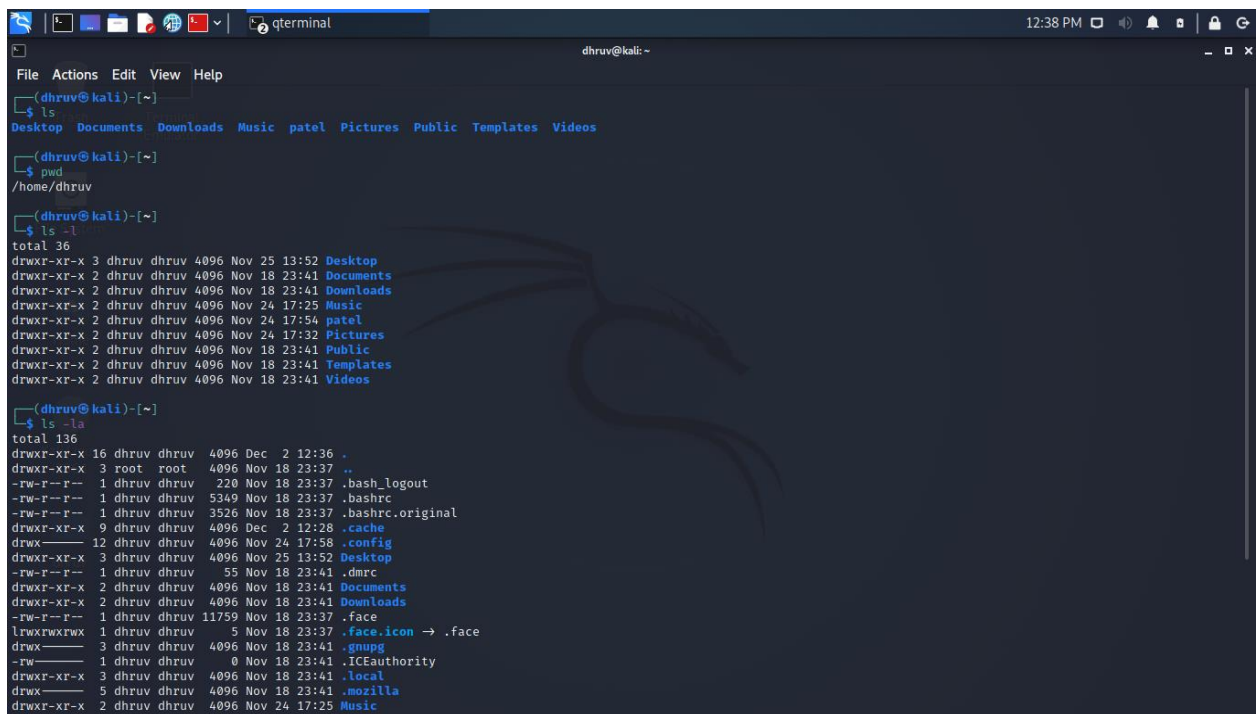
# Practical-1

## (Linux commands)

1. **pwd** — When you first open the terminal, you are in the home directory of your user. To know which directory you are in, you can use the “**pwd**” command. It gives us the absolute path, which means the path that starts from the root. The root is the base of the Linux file system. It is denoted by a forward slash( / ). The user directory is usually something like “/home/username”.
2. **ls** - Use the “**ls**” command to know what files are in the directory you are in. You can see all the hidden files by using the command “**ls -a**”.
3. **cd** - Use the “**cd**” command to go to a directory.
4. **mkdir** - Use the **mkdir** command when you need to create a folder or a directory.
5. **rmdir** - Use **rmdir** to delete a directory.
6. **touch** — The **touch** command is used to create a file. It can be anything, from an empty txt file to an empty zip file.
7. **man & --help** — To know more about a command and how to use it, use the **man** command. It shows the manual pages of the command. For example, “**man cd**” shows the manual pages of the **cd** command. Typing in the command name and the

argument helps it show which ways the command can be used (e.g., **cd -help**).

8. **cp** — Use the **cp** command to copy files through the command line. It takes two arguments: The first is the location of the file to be copied, the second is where to copy.
9. **mv** — Use the **mv** command to move files through the command line.
10. **ping** — Use **ping** to check your connection to a server.

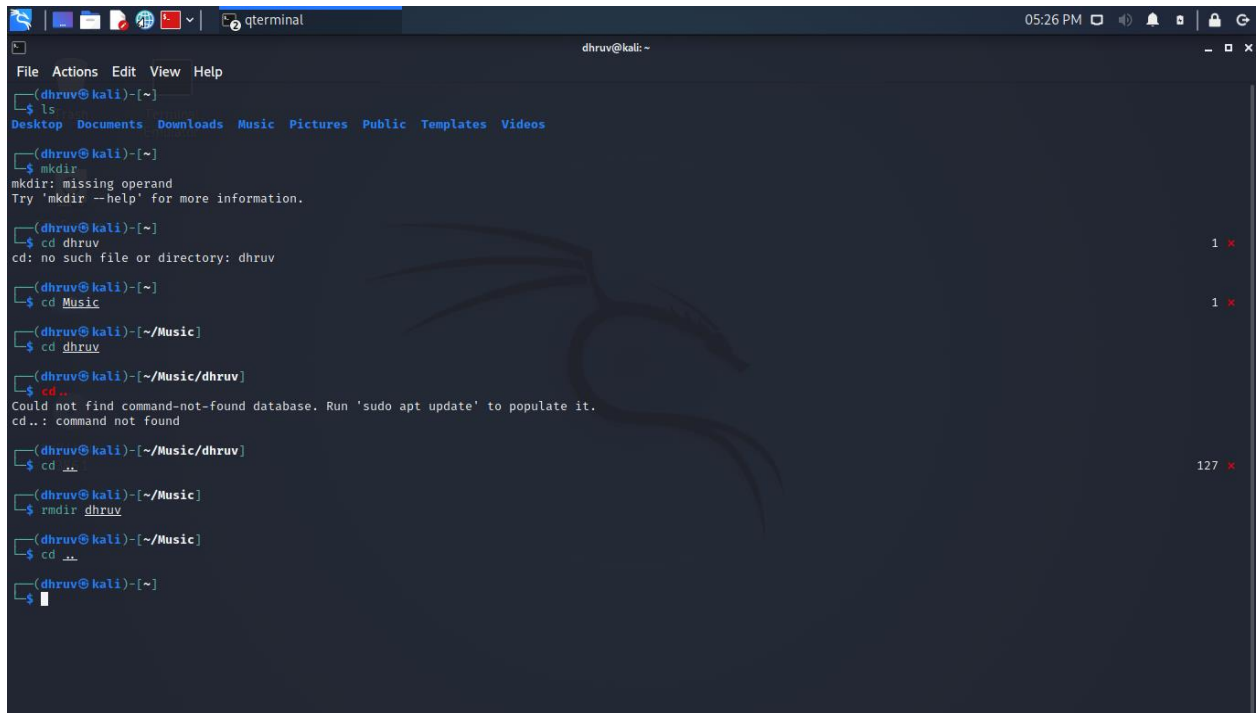


```
(dhruv@kali)~$ ls
Desktop  Documents  Downloads  Music  patel  Pictures  Public  Templates  Videos

(dhruv@kali)~$ pwd
/home/dhruv

(dhruv@kali)~$ ls -l
total 36
drwxr-xr-x 3 dhruv dhruv 4096 Nov 25 13:52 Desktop
drwxr-xr-x 2 dhruv dhruv 4096 Nov 18 23:41 Documents
drwxr-xr-x 2 dhruv dhruv 4096 Nov 18 23:41 Downloads
drwxr-xr-x 2 dhruv dhruv 4096 Nov 24 17:25 Music
drwxr-xr-x 2 dhruv dhruv 4096 Nov 24 17:54 patel
drwxr-xr-x 2 dhruv dhruv 4096 Nov 24 17:32 Pictures
drwxr-xr-x 2 dhruv dhruv 4096 Nov 18 23:41 Public
drwxr-xr-x 2 dhruv dhruv 4096 Nov 18 23:41 Templates
drwxr-xr-x 2 dhruv dhruv 4096 Nov 18 23:41 Videos

(dhruv@kali)~$ ls -la
total 136
drwxr-xr-x 16 dhruv dhruv 4096 Dec  2 12:36 .
drwxr-xr-x  3 root  root  4096 Nov 18 23:37 ..
-rw-r--r--  1 dhruv dhruv  220 Nov 18 23:37 .bash_logout
-rw-r--r--  1 dhruv dhruv 5349 Nov 18 23:37 .bashrc
-rw-r--r--  1 dhruv dhruv 3526 Nov 18 23:37 .bashrc.original
drwxr-xr-x  9 dhruv dhruv 4096 Dec  2 12:28 .cache
drwxr-xr-x 12 dhruv dhruv 4096 Nov 24 17:58 .config
drwxr-xr-x  3 dhruv dhruv 4096 Nov 25 13:52 Desktop
-rw-r--r--  1 dhruv dhruv  55 Nov 18 23:41 .dmrc
drwxr-xr-x  2 dhruv dhruv 4096 Nov 18 23:41 Documents
drwxr-xr-x  2 dhruv dhruv 4096 Nov 18 23:41 Downloads
-rw-r--r--  1 dhruv dhruv 11759 Nov 18 23:37 .face
lrwxrwxrwx  1 dhruv dhruv  5 Nov 18 23:37 .face.icon -> .face
drwxr-xr-x  3 dhruv dhruv 4096 Nov 18 23:41 .gnupg
-rw-r--r--  1 dhruv dhruv  40 Nov 18 23:41 .ICEauthority
drwxr-xr-x  3 dhruv dhruv 4096 Nov 18 23:41 .local
drwxr-xr-x  5 dhruv dhruv 4096 Nov 18 23:41 .mozilla
drwxr-xr-x  2 dhruv dhruv 4096 Nov 24 17:25 Music
```



```
(dhruv@kali)-[~]
└─$ ls
Desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos

(dhruv@kali)-[~]
└─$ mkdir
mkdir: missing operand
Try 'mkdir --help' for more information.

(dhruv@kali)-[~]
└─$ cd dhruv
cd: no such file or directory: dhruv

(dhruv@kali)-[~]
└─$ cd Music
1 x

(dhruv@kali)-[~/Music]
└─$ cd dhruv
1 x

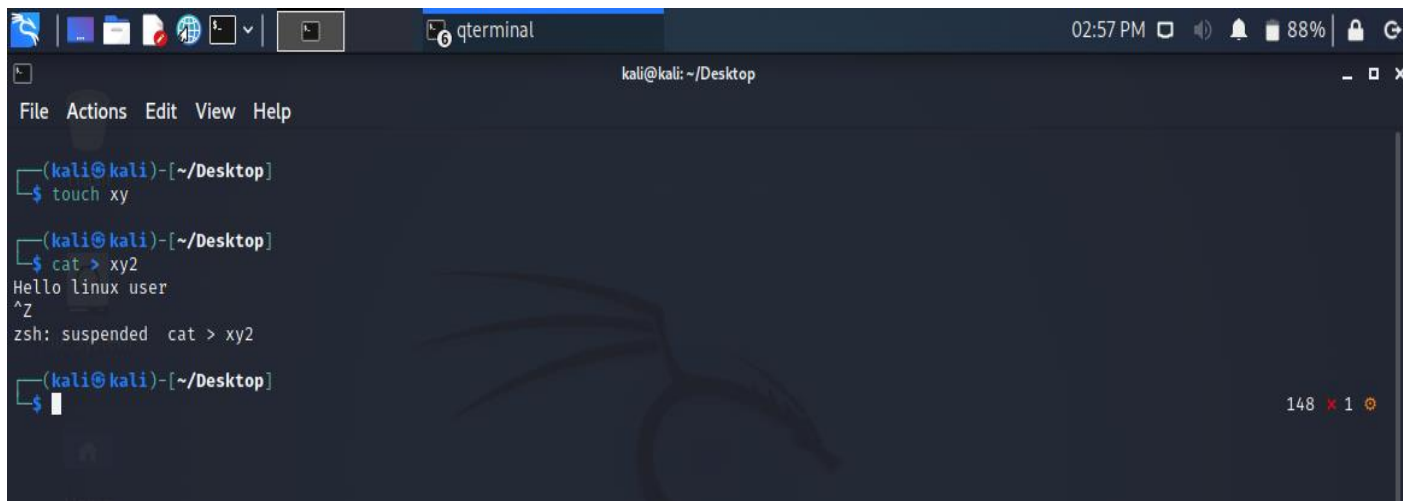
(dhruv@kali)-[~/Music/dhruv]
└─$ cd ..
Could not find command-not-found database. Run 'sudo apt update' to populate it.
cd..: command not found
127 x

(dhruv@kali)-[~/Music/dhruv]
└─$ cd .
127 x

(dhruv@kali)-[~/Music]
└─$ rmdir dhruv

(dhruv@kali)-[~/Music]
└─$ cd .
127 x

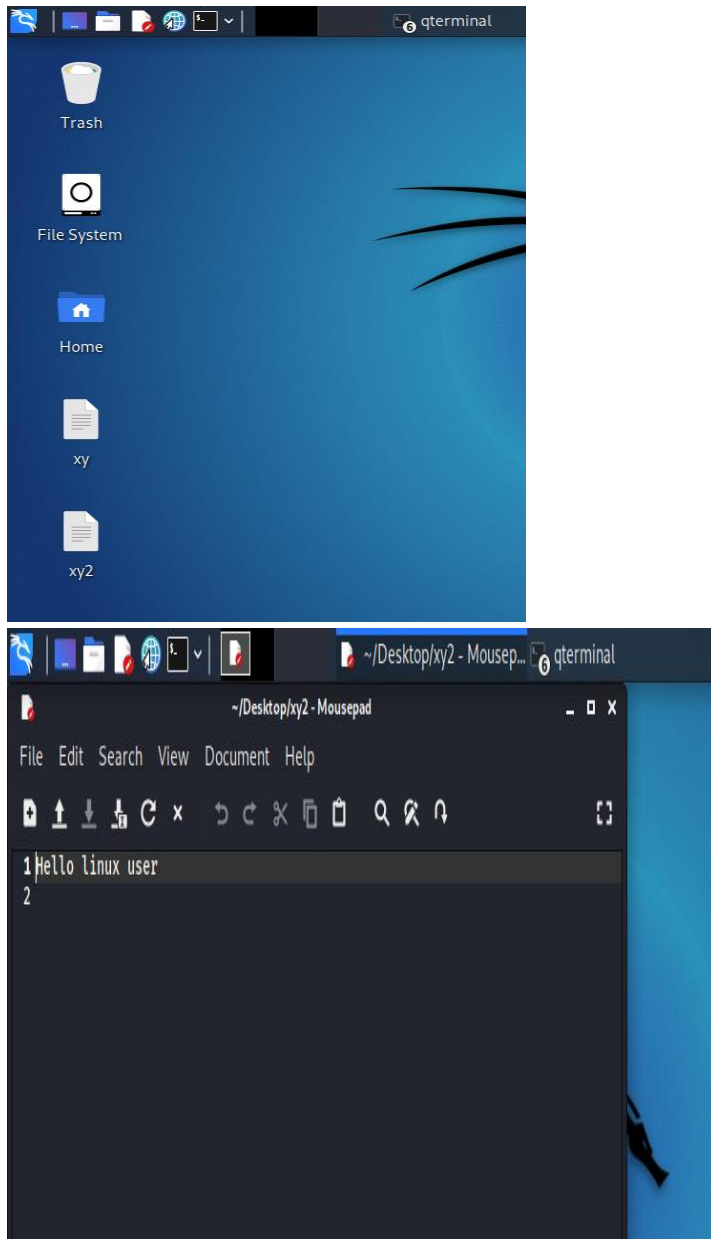
(dhruv@kali)-[~]
└─$
```

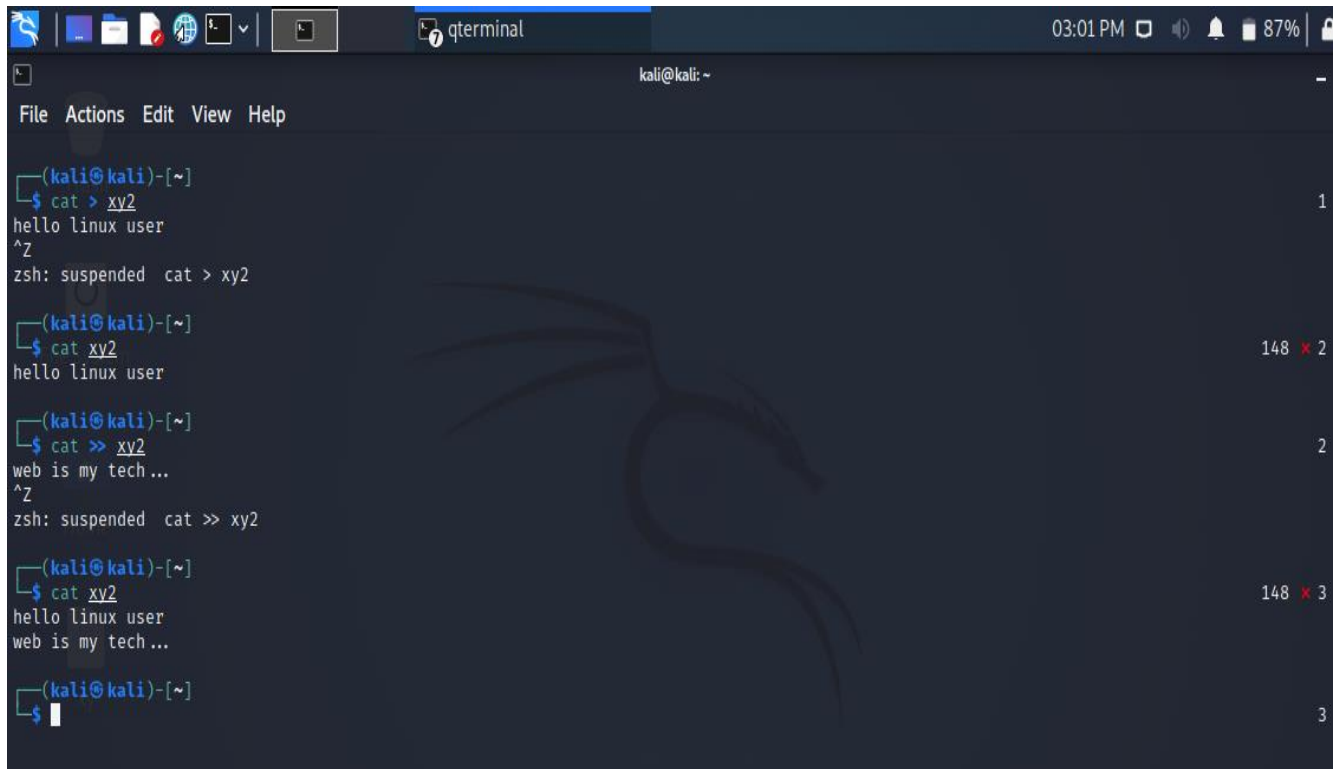


```
(kali@kali)-[~/Desktop]
└─$ touch xy

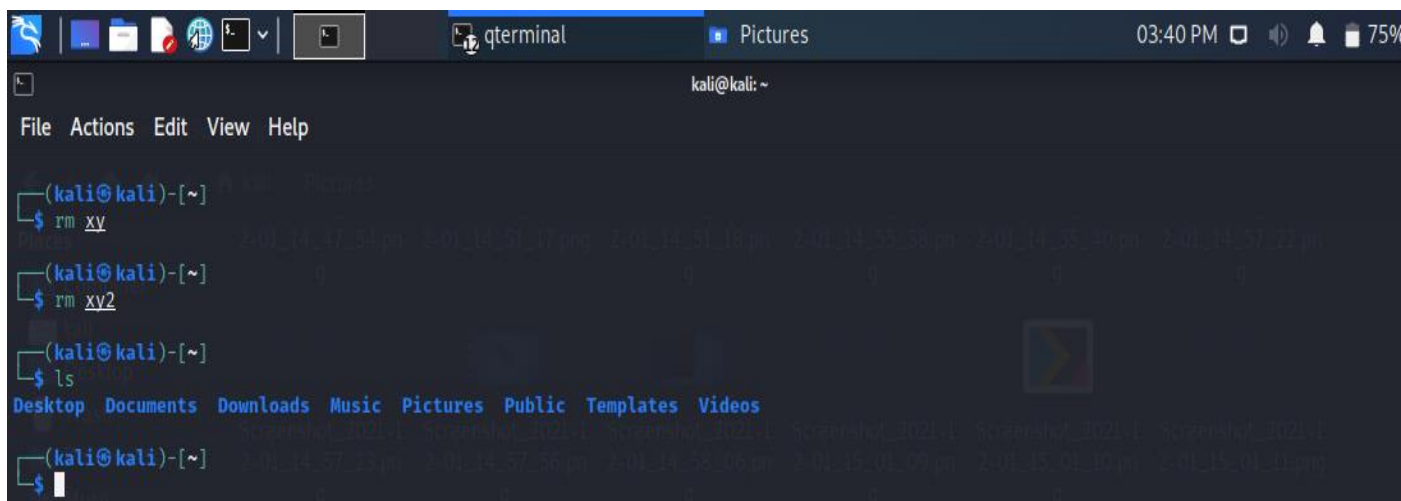
(kali@kali)-[~/Desktop]
└─$ cat > xy2
Hello linux user
^Z
zsh: suspended  cat > xy2

(kali@kali)-[~/Desktop]
└─$
```





```
kali@kali: ~  
File Actions Edit View Help  
(kali@kali)-[~]  
$ cat > xy2  
hello linux user  
^Z  
zsh: suspended cat > xy2  
(kali@kali)-[~]  
$ cat xy2  
hello linux user  
(kali@kali)-[~]  
$ cat >> xy2  
web is my tech ...  
^Z  
zsh: suspended cat >> xy2  
(kali@kali)-[~]  
$ cat xy2  
hello linux user  
web is my tech ...  
(kali@kali)-[~]  
$
```



```
kali@kali: ~  
File Actions Edit View Help  
(kali@kali)-[~]  
$ rm xy  
(kali@kali)-[~]  
$ rm xy2  
(kali@kali)-[~]  
$ ls  
Desktop Documents Downloads Music Pictures Public Templates Videos  
(kali@kali)-[~]  
$
```

```
kali@kali: ~/Desktop
File Actions Edit View Help

(kali@kali)-[~]
$ cd Desktop

(kali@kali)-[~/Desktop]
$ mkdir abc

(kali@kali)-[~/Desktop]
$ mkdir f1 f2 f3 f4 f5

(kali@kali)-[~/Desktop]
$ ls
abc f1 f2 f3 f4 f5

(kali@kali)-[~/Desktop]
$ touch xy

(kali@kali)-[~/Desktop]
$ cat > xy2
hello
^Z
zsh: suspended cat > xy2

(kali@kali)-[~/Desktop]
$ ls
abc f1 f2 f3 f4 f5 xy xy2

(kali@kali)-[~/Desktop]
$
```

```
kali@kali: ~/Desktop
File Actions Edit View Help

(kali@kali)-[~/Desktop]
$ cp xy2 new

(kali@kali)-[~/Desktop]
$ ls
abc f1 f2 f3 f4 f5 new xy xy2

(kali@kali)-[~/Desktop]
$ cp xy2 /f1
cp: cannot create regular file '/f1': Permission denied

(kali@kali)-[~/Desktop]
$ sudo cp xy2 /f1
[sudo] password for kali:

(kali@kali)-[~/Desktop]
$ cd f1

(kali@kali)-[~/Desktop/f1]
$ ls

(kali@kali)-[~/Desktop/f1]
$ cd ..

(kali@kali)-[~/Desktop]
$ ls
abc f1 f2 f3 f4 f5 new xy xy2

(kali@kali)-[~/Desktop]
$
```

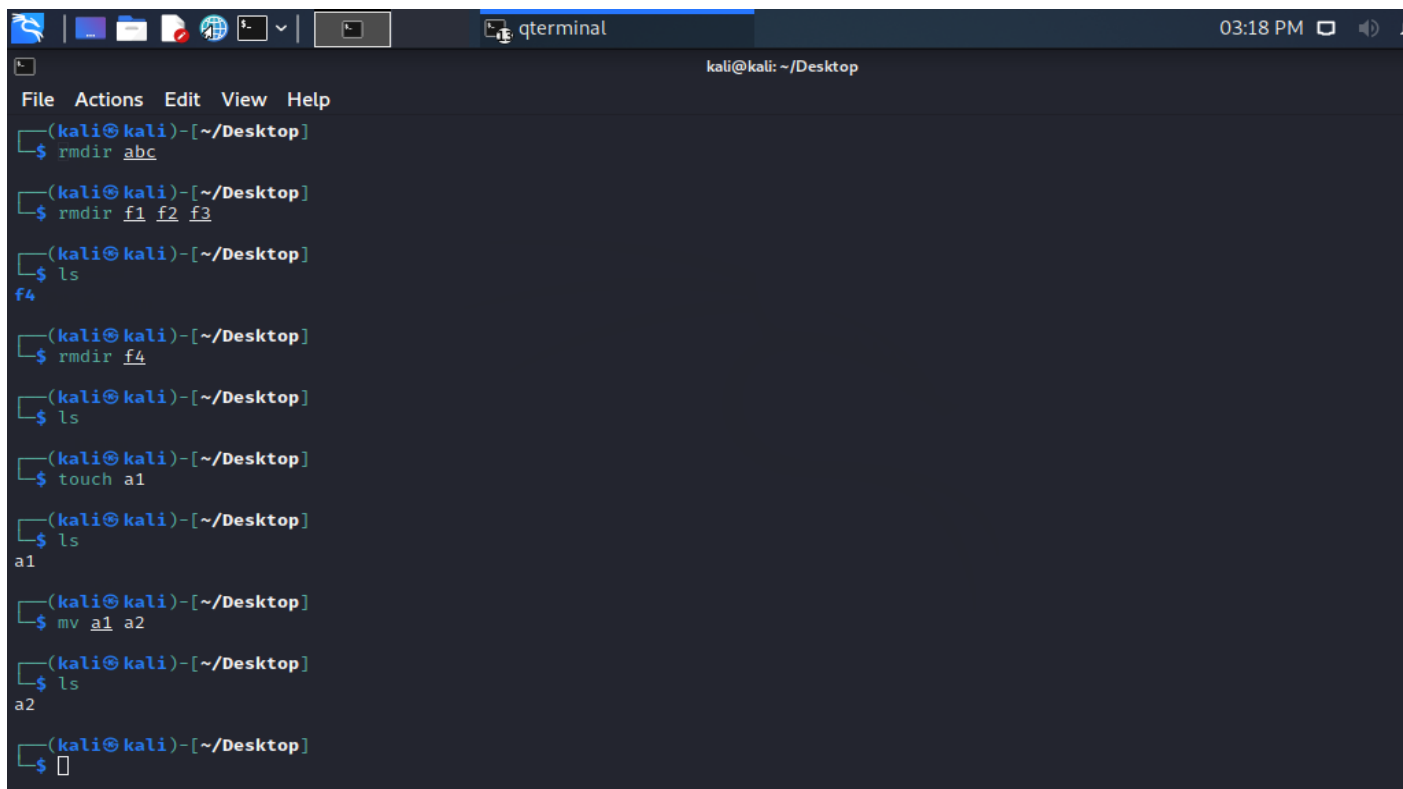


```
(kali㉿kali)-[~/Desktop]
$ rm xy

(kali㉿kali)-[~/Desktop]
$ ls
abc  f1  f2  f3  f4  new  xy2

(kali㉿kali)-[~/Desktop]
$ rm xy2

(kali㉿kali)-[~/Desktop]
$
```



```
kali@kali: ~/Desktop
File Actions Edit View Help

(kali㉿kali)-[~/Desktop]
$ rmdir abc

(kali㉿kali)-[~/Desktop]
$ rmdir f1 f2 f3

(kali㉿kali)-[~/Desktop]
$ ls
f4

(kali㉿kali)-[~/Desktop]
$ rmdir f4

(kali㉿kali)-[~/Desktop]
$ ls

(kali㉿kali)-[~/Desktop]
$ touch a1

(kali㉿kali)-[~/Desktop]
$ ls
a1

(kali㉿kali)-[~/Desktop]
$ mv a1 a2

(kali㉿kali)-[~/Desktop]
$ ls
a2

(kali㉿kali)-[~/Desktop]
$
```

```
(kali㉿kali)-[~/Desktop]
$ mkdir fo1

(kali㉿kali)-[~/Desktop]
$ ls
a2  fo1

(kali㉿kali)-[~/Desktop]
$ mv fo1 fo2

(kali㉿kali)-[~/Desktop]
$ ls
a2  fo2

(kali㉿kali)-[~/Desktop]
$
```

```
(kali㉿kali)-[~/Desktop]
└─$ rmdir fo2

(kali㉿kali)-[~/Desktop]
└─$ rm a2

(kali㉿kali)-[~/Desktop]
└─$ ls

(kali㉿kali)-[~/Desktop]
└─$ cd ..

(kali㉿kali)-[~]
└─$ pwd
/home/kali

(kali㉿kali)-[~]
└─$ cd

(kali㉿kali)-[~]
└─$
```

