NAME : HASEEB UR REHMAN

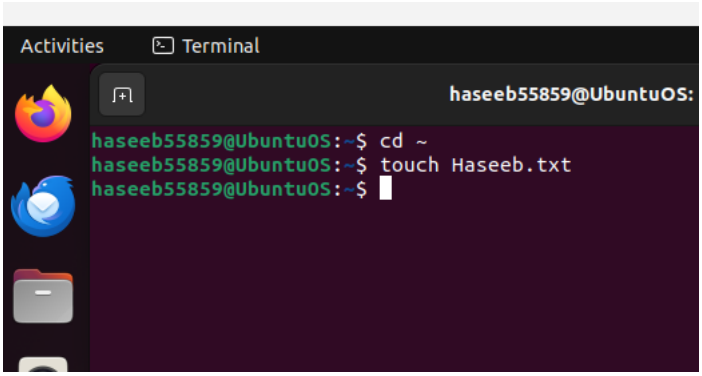
SAP ID : 55859

SECTION : SE 5-2

LAB TASK : 04

1. Create a blank text file on your home directory with your name

Ans :



2. Make a directory with name student

Ans :

```
haseeb55859@UbuntuOS:~$ mkdir student
haseeb55859@UbuntuOS:~$
```

3. Change the directory to student and copy your text file in this directory

Ans :

```
haseeb55859@UbuntuOS:~$ cd student
haseeb55859@UbuntuOS:~/student$ cp ~/Haseeb.txt .
```

4. Assign no permission to anyone (use numeric method for permission

Ans :

```
haseeb55859@UbuntuOS:~/student$ chmod 000 Haseeb.txt
haseeb55859@UbuntuOS:~/student$
```

5. Verify that above task has done successfully

Ans :

```
haseeb55859@UbuntuOS:~/student$ ls -l Haseeb.txt
---------- 1 haseeb55859 haseeb55859 0 Sep 16 09:05 Haseeb.txt
haseeb55859@UbuntuOS:~/student$
```

6. Now try to write in this file. If error occurs, state why

Ans :

```
haseeb55859@UbuntuOS:~/student$ echo "Test" > Haseeb.txt
bash: Haseeb.txt: Permission denied
haseeb55859@UbuntuOS:~/student$
```

7. Assign permission of write only to user (do it twice by using both symbolic and numeric methods).

Ans :

```
bash: Haseeb.txt: Permission denied
haseeb55859@UbuntuOS:~/student$ chmod u=w Haseeb.txt
haseeb55859@UbuntuOS:~/student$ chmod 200 Haseeb.txt
```

8. Verify that above task has done successfully

Ans :

```
haseeb55859@UbuntuOS:~/student$ ls -l Haseeb.txt
--w------- 1 haseeb55859 haseeb55859 0 Sep 16 09:05 Haseeb.txt
```

9. Write your introduction in 5 to 7 lines in .txt file

Ans :

```
haseeb55859@UbuntuOS:~/student$ echo -e "My name is Haseeb.\nI am a student of S
E.\nI enjoy language Python." > Haseeb.txt
```

10. Display contents of the file. If error occurs, state why

Ans :

```
haseeb55859@UbuntuOS:~/student$ cat Haseeb.txt
cat: Haseeb.txt: Permission denied
```

11. Assign permission of read only to user

Ans :

```
haseeb55859@UbuntuOS:~/student$ chmod u=r Haseeb.txt
haseeb55859@UbuntuOS:~/student$ chmod 400 Haseeb.txt
```

12. Verify that above task has done successfully

Ans :

```
haseeb55859@UbuntuOS:~/student$ ls -l Haseeb.txt
-r-------- 1 haseeb55859 haseeb55859 66 Sep 16 09:30 Haseeb.txt
```

13. Display contents of the file

Ans :

```
haseeb55859@UbuntuOS:~/student$ cat Haseeb.txt
My name is Haseeb.
I am a student of SE.
I enjoy language Python.
```

14. Assign permissions of read and execute only to user

Ans :

```
haseeb55859@UbuntuOS:~/student$ chmod u=rx Haseeb.txt
haseeb55859@UbuntuOS:~/student$ chmod 500 Haseeb.txt
```

15. Verify that above task has done successfully

Ans :

```
haseeb55859@UbuntuOS:~/student$ ls -l Haseeb.txt
-r-x------ 1 haseeb55859 haseeb55859 66 Sep 16 09:30 Haseeb.txt
```

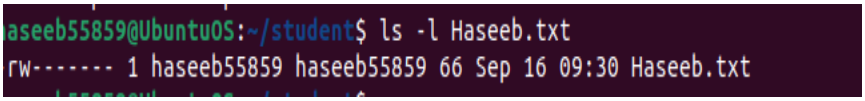
16. Assign permissions of read and write only to user

Ans :

```
haseeb55859@UbuntuOS:~/student$ chmod u=rw Haseeb.txt
haseeb55859@UbuntuOS:~/student$ chmod 600 Haseeb.txt
```

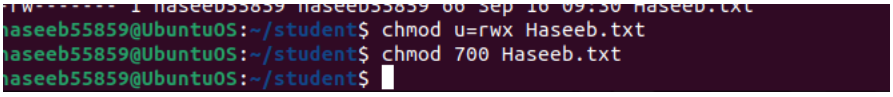
17. Verify that above task has done successfully

Ans :



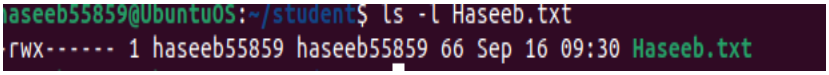
18. Assign all permissions to user

Ans :



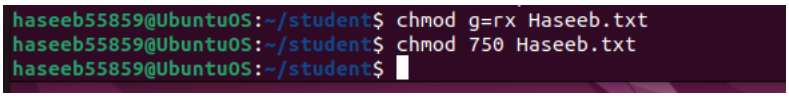
19. Verify that above task has done successfully

Ans :



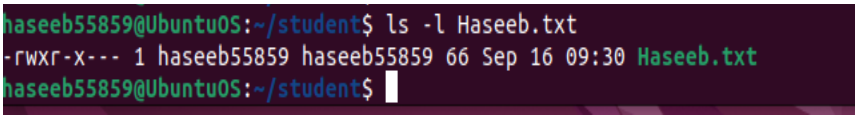
20. Assign permission of read and execute only to group

Ans :



21. Verify that above task has done successfully

Ans :



22. Assign all permissions to all users

Ans :

```
haseeb55859@UbuntuOS:~/student$ chmod a=rwx Haseeb.txt
haseeb55859@UbuntuOS:~/student$ chmod 777 Haseeb.txt
haseeb55859@UbuntuOS:~/student$
```

23. Verify that above task has done successfully

Ans :

```
haseeb55859@UbuntuOS:~/student$ ls -l Haseeb.txt
-rwxrwxrwx 1 haseeb55859 haseeb55859 66 Sep 16 09:30 Haseeb.txt
```

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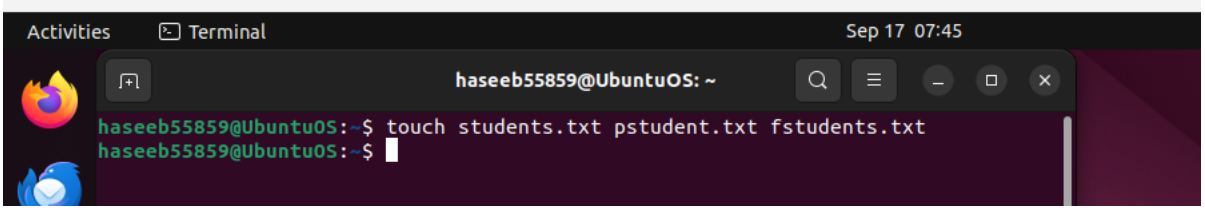
2. Show Simulation results after performing the following tasks by using suitable commands in Linux. Also show command/commands used for specific task.

1. Create 3 empty text files and name them as students.txt, pstudent.txt and fstudents.txt.

Ans :



2. Assign permissions to read only permission to the user (do it twice by using both symbolic and numeric methods)

Ans :

```
haseeb55859@UbuntuOS:~$ chmod u=r students.txt pstudent.txt fstudents.txt
haseeb55859@UbuntuOS:~$ chmod 400 students.txt pstudent.txt fstudents.txt
haseeb55859@UbuntuOS:~$
```

3. Enter at least 10 10 different students' names in pstudent.txt and fstudent.txt. If any error appears, debug that error for user only.

Ans :

```
haseeb55859@UbuntuOS:~$ echo "Ali" >> pstudent.txt
bash: pstudent.txt: Permission denied
```

```
haseeb55859@UbuntuOS: ~
haseeb55859@UbuntuOS:~$ cat > pstudent.txt <<EOF
> Ali
> Sara
> Hamza
> Zain
> Usman
> Kiran
> Bilal
> Ayesha
> Ahmed
> Nida
> EOF
haseeb55859@UbuntuOS:~$ cat > fstudents.txt <<EOF
> Tariq
> Sadia
> Omer
> Fatima
> Hassan
> Maryam
> Asad
> Imran
> Shahid
> Noor
> EOF
```

4. Create directory `RIPHAH` and give read-only permission to user and group

Ans :

```
haseeb55859@UbuntuOS:~$ mkdir RIPHAH
haseeb55859@UbuntuOS:~$ chmod u=r,g=r RIPHAH
haseeb55859@UbuntuOS:~$ chmod 400 RIPHAH
haseeb55859@UbuntuOS:~$
```

5. Copy all files to RIPHAH

Ans:

```
haseeb55859@UbuntuOS:~$ cp students.txt pstudent.txt fstudents.txt RIPHAH/
cp: cannot stat 'RIPHAH/students.txt': Permission denied
cp: cannot stat 'RIPHAH/pstudent.txt': Permission denied
cp: cannot stat 'RIPHAH/fstudents.txt': Permission denied
```

```
haseeb55859@UbuntuOS:~$ chmod u=rwx,g=rwx RIPHAH
haseeb55859@UbuntuOS:~$ cp students.txt pstudent.txt fstudents.txt RIPHAH/
haseeb55859@UbuntuOS:~$
```

6. Append first 5 sorted names from pstudent.txt and last 5 from fstudents.txt to students.txt

Ans :

```
haseeb55859@UbuntuOS:~$ sort pstudent.txt | head -5 >> students.txt
haseeb55859@UbuntuOS:~$ sort fstudents.txt | tail -5 >> students.txt
haseeb55859@UbuntuOS:~$
```

7. Show contents of sorted names from students.txt

Ans :

```
haseeb55859@UbuntuOS:~$ sort students.txt
Ahmed
Ahmed
Ali
Ali
Ayesha
Ayesha
Bilal
Bilal
Hamza
Hamza
Noor
Omer
Sadia
Shahid
Tariq
haseeb55859@UbuntuOS:~$
```

8. Change permissions

Ans :

```
haseeb55859@UbuntuOS:~$ chmod u=r students.txt
haseeb55859@UbuntuOS:~$ chmod u=rw pstudent.txt fstudents.txt
haseeb55859@UbuntuOS:~$
```

```
haseeb55859@UbuntuOS:~$ chmod 400 students.txt
haseeb55859@UbuntuOS:~$ chmod 600 pstudent.txt fstudents.txt
```

9. Try to append a student name to student.txt

Ans :

```
haseeb55859@UbuntuOS:~$ echo "NewStudent" >> students.txt
bash: students.txt: Permission denied
haseeb55859@UbuntuOS:~$
```

```
haseeb55859@UbuntuOS:~$ chmod u=rw students.txt
haseeb55859@UbuntuOS:~$ echo "NewStudent" >> students.txt
haseeb55859@UbuntuOS:~$ chmod u=r students.txt
haseeb55859@UbuntuOS:~$ S
```

10 . Display contents of all files

Ans :

```
haseeb55859@UbuntuOS:~$ cat students.txt
Ahmed
Ali
Ayesha
Bilal
Hamza
Ahmed
Ali
Ayesha
Bilal
Hamza
Noor
Omer
Sadia
Shahid
Tariq
NewStudent
```

```
haseeb55859@UbuntuOS:~$ cat pstudent.txt
Ali
Sara
Hamza
Zain
Usman
Kiran
Bilal
Ayesha
Ahmed
Nida
```

```
haseeb55859@UbuntuOS:~$ cat fstudents.txt
Tariq
Sadia
Omer
Fatima
Hassan
Maryam
Asad
Imran
Shahid
Noor
```

11. Show permissions and contents of RIPHAH

Ans :

```
haseeb55859@UbuntuOS:~$ ls -l RIPHAH
total 8
-rw------- 1 haseeb55859 haseeb55859 62 Sep 17 08:01 fstudents.txt
-rw------- 1 haseeb55859 haseeb55859 56 Sep 17 08:01 pstudent.txt
-r-------- 1 haseeb55859 haseeb55859  0 Sep 17 08:01 students.txt
haseeb55859@UbuntuOS:~$ cat RIPHAH/students.txt
haseeb55859@UbuntuOS:~$ cat RIPHAH/pstudent.txt
Ali
Sara
Hamza
Zain
Usman
Kiran
Bilal
Ayesha
Ahmed
Nida
haseeb55859@UbuntuOS:~$ cat RIPHAH/fstudents.txt
Tariq
Sadia
Omer
Fatima
Hassan
Maryam
Asad
Imran
Shahid
Noor
```