

NETWORKING & SYSTEM ADMINISTRATION LAB**Experiment No.:5****Name: ALLEN S PHILIP****Roll No: 20****Batch: RMCA- A****Date :25-03-2022****Aim:** Basic Linux commands and permission settings.**Procedure:****1. cp**

cp stands for copy. This command is used to copy files or group of files or directory. It creates an exact image of a file

[options]- -r, -f, -rf.

cp -r

cp -f

cp -rf

2. Mv

mv stands for copy. This command is used to move files or group of files or directory.

mv -r

mv -f

mv -rf

3. vi

Vi also called **vim**. The vi editor is a command-line, interactive editor that you can use to create and modify text files.

Synatx

vi filename

It will open the editor in read only mode

Press **i** to insert

If you done the insert operation . then you can leave the page

Press **esc** to escape and type the below command.

This command is used write the edited or inserted file and quit from it , and back to terminal.

then you can use “:**wq!**” To save and exit from that vim.

4. **more**

‘more’ command is used to display the whole content in your selected file

Syntax

more <filename>

5. **cat**

cat command is also to display content in a file.

6. **head**

This head command is used to display the first 10 lines on your selected file.

And you can also view the head part of the file with specified number of lines based on user choice.

Syntax

head -n <no of lines> <filename>

7. **tail**

This command is used to print or display the last few lines in your document.

You can also use

Tail -n 3 ubuntu.txt

To print last 3 lines in the ubuntu.txt file.

8. chmod

This command is used to set permission to a file for user/admin ,group and others.

Here **user/admin** represent as **u**

Group represent as **g**

And **others** represent as **o**

You can see the permission details of a file using **ls -l**

syntax for giving permission

chmod u/g/o rwx

Another method

chmod 777<filename>

Here 777is represented as

First 7 represents the user permission

ie, user has permission to read, write and execute

Read = 4

Write =2

Execute = 1

Total of these are 7

And the second 7 represents as group and 3rd 7 represents the others

Here user , group and others have all permission

Example

chmod 333 demotxt.txt

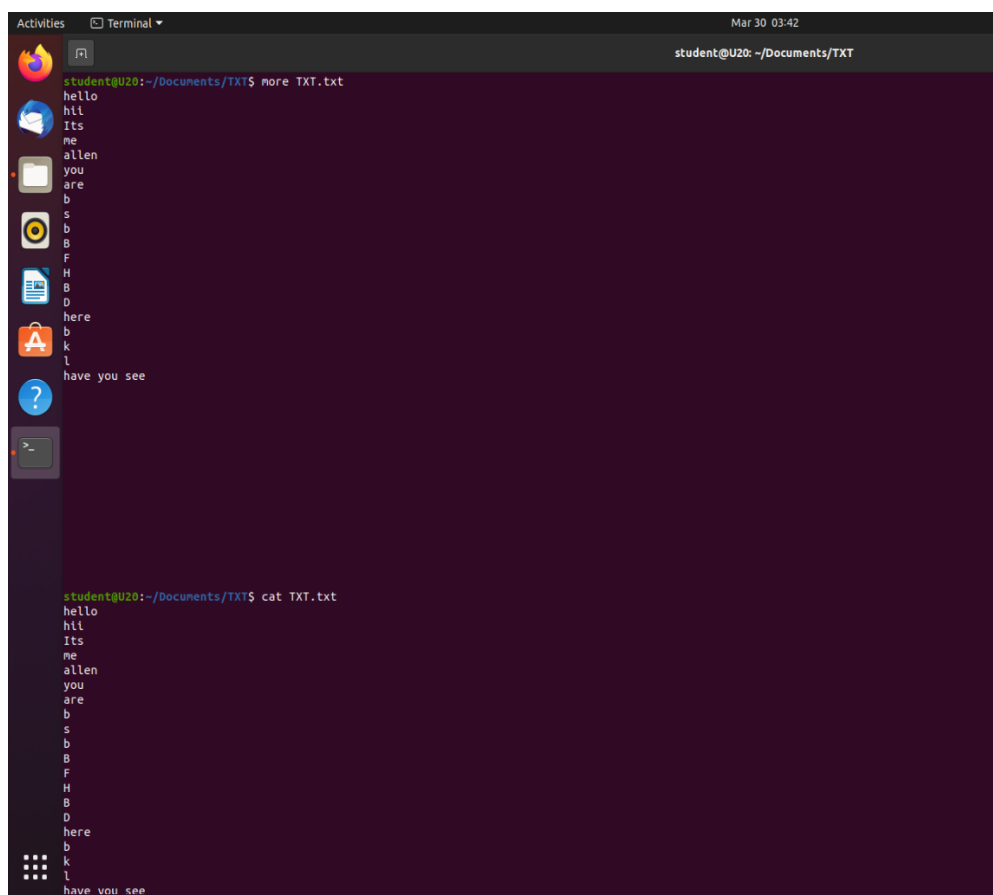
Output

Activities Terminal Mar 30 03:41

student@U20: ~/Documents/TXT

```
student@U20:~/Documents$ touch TXT.txt
student@U20:~/Documents$ mkdir TXT
student@U20:~/Documents$ ls
TXT
student@U20:~/Documents$ cp TXT.txt TXT
student@U20:~/Documents$ ls
TXT
student@U20:~/Documents$ cd TXT/
student@U20:~/Documents/TXT$ ls
TXT.txt
student@U20:~/Documents/TXT$ cd ..
student@U20:~/Documents$ mkdir NEW
student@U20:~/Documents$ cd NEW
student@U20:~/Documents/NEW$ file1.txt
file1.txt: command not found
student@U20:~/Documents/NEW$ touch file1.txt
student@U20:~/Documents/NEW$ touch file2.txt
student@U20:~/Documents/NEW$ ls
file1.txt  file2.txt
student@U20:~/Documents/NEW$ cd ..
student@U20:~/Documents$ cp -r NEW TXT
student@U20:~/Documents$ ls
NEW  TXT  TXT.txt
student@U20:~/Documents$ cd TXT
student@U20:~/Documents/TXT$ ls
NEW  TXT.txt
student@U20:~/Documents/TXT$ cd NE
bash: cd: NE: No such file or directory
student@U20:~/Documents/TXT$ cd NEW/
student@U20:~/Documents/TXT/NEW$ ls
file1.txt  file2.txt
student@U20:~/Documents/TXT/NEW$ cd ..
student@U20:~/Documents/TXT$ ls
NEW  TXT.txt
student@U20:~/Documents/TXT$ cp -f NEW NEW2
cp: -r not specified; omitting directory 'NEW'
student@U20:~/Documents/TXT$ cp -f TXT.txt a.txt
student@U20:~/Documents/TXT$ ls
a.txt  NEW  TXT.txt
student@U20:~/Documents/TXT$ cp -rf NEW NEW2
student@U20:~/Documents/TXT$ ls
a.txt  NEW  NEW2  TXT.txt
student@U20:~/Documents/TXT$ cd NEW2
student@U20:~/Documents/TXT/NEW2$ ls
file1.txt  file2.txt
student@U20:~/Documents/TXT/NEW2$ cd ..
student@U20:~/Documents/TXT$ ls
a.txt  NEW  NEW2  TXT.txt
student@U20:~/Documents/TXT$ vi TXT.txt
student@U20:~/Documents/TXT$
```

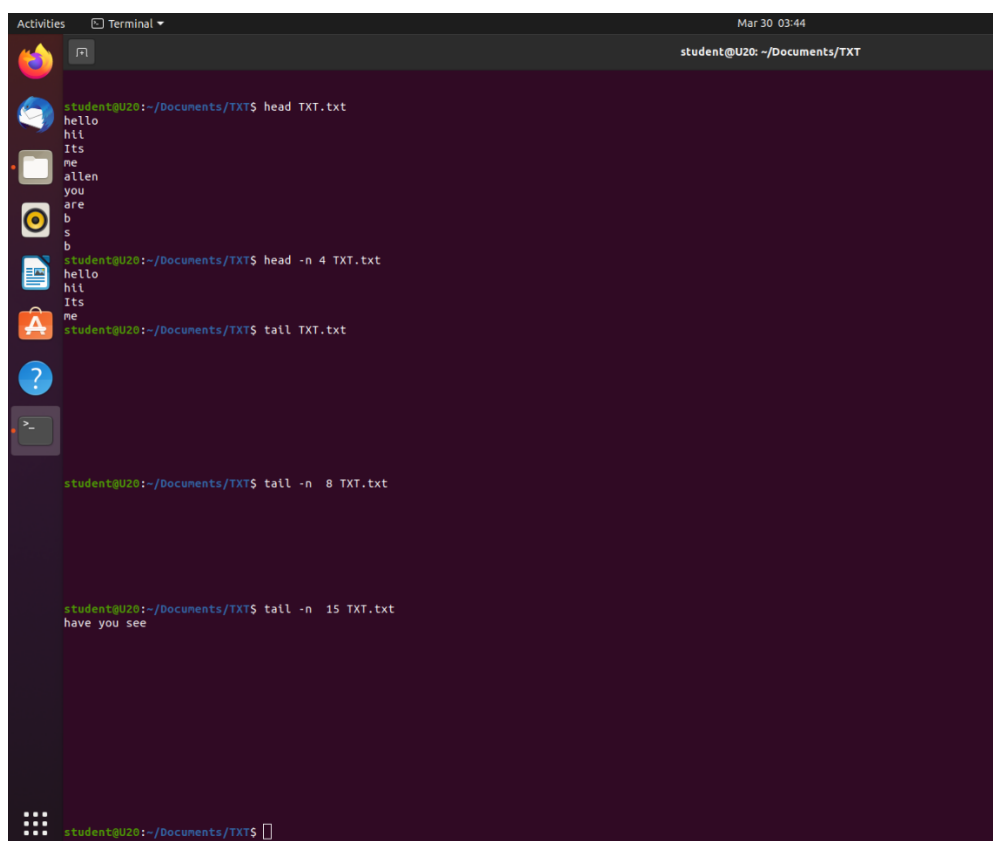
A screenshot of a Linux desktop environment. The desktop background is a dark purple color. On the left side, there is a vertical dock with several application icons: a Firefox browser icon, a file manager icon, a mail icon, a calendar icon, a music icon, a video player icon, a text editor icon, a terminal icon, and a question mark icon. The top of the screen shows a panel with the 'Activities' button, a 'Terminal' window icon, and the date 'Mar 30 03:40'. The terminal window is open, displaying the text 'student@U20: ~/Documents/TXT' at the top. Below this, a poem is displayed line by line: 'hello', 'hil', 'its', 'ne', 'allen', 'you', 'are', 'b', 's', 'b', 'b', 'F', 'H', 'B', 'D', 'here', 'b', 'k', 'l', 'have you see'. The terminal window has a dark background and a light-colored text. The overall layout is clean and organized.



A terminal window titled 'Terminal' with a dark purple background. The top bar shows 'Activities', 'Terminal', and the date 'Mar 30 03:42'. The user is logged in as 'student@U20' in the directory '~/Documents/TXT'. The command 'more TXT.txt' has been executed, displaying the following text: 'hello', 'hll', 'Its', 'me', 'allen', 'you', 'are', 'b', 's', 'b', 'B', 'F', 'H', 'B', 'D', 'here', 'b', 'k', 'l', 'have you see'. The left sidebar contains icons for various applications, and a dock is visible at the bottom.

```
student@U20:~/Documents/TXT$ more TXT.txt
hello
hll
Its
me
allen
you
are
b
s
b
B
F
H
B
D
here
b
k
l
have you see

student@U20:~/Documents/TXT$ cat TXT.txt
hello
hll
Its
me
allen
you
are
b
s
b
B
F
H
B
D
here
b
k
l
have you see
```



A terminal window titled 'Terminal' with a dark purple background. The top bar shows 'Activities', 'Terminal', and the date 'Mar 30 03:44'. The user is logged in as 'student@U20' in the directory '~/Documents/TXT'. The following commands have been executed: 'head TXT.txt' (displaying the first 10 lines), 'head -n 4 TXT.txt' (displaying the first 4 lines), 'tail TXT.txt' (displaying the last 10 lines), and 'tail -n 8 TXT.txt' (displaying the last 8 lines). The final command 'tail -n 15 TXT.txt' is shown but its output is not visible. The left sidebar and dock are also visible.

```
student@U20:~/Documents/TXT$ head TXT.txt
hello
hll
Its
me
allen
you
are
b
s
b

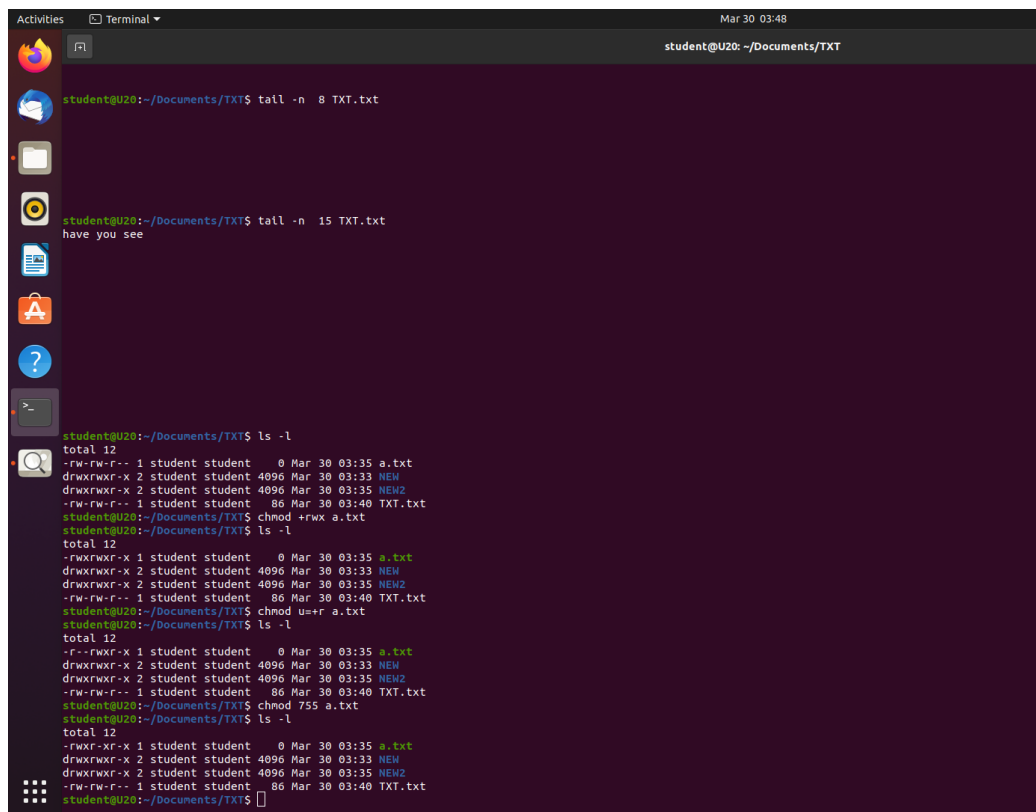
student@U20:~/Documents/TXT$ head -n 4 TXT.txt
hello
hll
Its
me

student@U20:~/Documents/TXT$ tail TXT.txt
b
k
l
have you see

student@U20:~/Documents/TXT$ tail -n 8 TXT.txt
b
k
l
have you see

student@U20:~/Documents/TXT$ tail -n 15 TXT.txt
have you see

student@U20:~/Documents/TXT$
```



```
Activities Terminal Mar 30 03:48
student@U20: ~/Documents/TXT
student@U20:~/Documents/TXT$ tail -n 8 TXT.txt
student@U20:~/Documents/TXT$ tail -n 15 TXT.txt
have you see
student@U20:~/Documents/TXT$ ls -l
total 12
-rw-rw-r-- 1 student student 0 Mar 30 03:35 a.txt
drwxrwxr-x 2 student student 4096 Mar 30 03:33 NEW
drwxrwxr-x 2 student student 4096 Mar 30 03:35 NEW2
-rw-rw-r-- 1 student student 86 Mar 30 03:40 TXT.txt
student@U20:~/Documents/TXT$ chmod +rwx a.txt
student@U20:~/Documents/TXT$ ls -l
total 12
-rwxrwxr-x 1 student student 0 Mar 30 03:35 a.txt
drwxrwxr-x 2 student student 4096 Mar 30 03:33 NEW
drwxrwxr-x 2 student student 4096 Mar 30 03:35 NEW2
-rw-rw-r-- 1 student student 86 Mar 30 03:40 TXT.txt
student@U20:~/Documents/TXT$ chmod u=r a.txt
student@U20:~/Documents/TXT$ ls -l
total 12
-r--rwxr-x 1 student student 0 Mar 30 03:35 a.txt
drwxrwxr-x 2 student student 4096 Mar 30 03:33 NEW
drwxrwxr-x 2 student student 4096 Mar 30 03:35 NEW2
-rw-rw-r-- 1 student student 86 Mar 30 03:40 TXT.txt
student@U20:~/Documents/TXT$ chmod 755 a.txt
student@U20:~/Documents/TXT$ ls -l
total 12
-rwxr-xr-x 1 student student 0 Mar 30 03:35 a.txt
drwxrwxr-x 2 student student 4096 Mar 30 03:33 NEW
drwxrwxr-x 2 student student 4096 Mar 30 03:35 NEW2
-rw-rw-r-- 1 student student 86 Mar 30 03:40 TXT.txt
student@U20:~/Documents/TXT$
```