Experiment No: 1

AIM: Linux commands: Working with Directories:

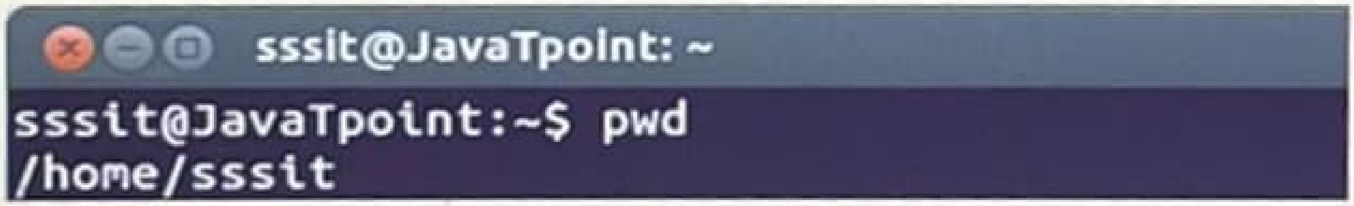
a. pwd, cd, absolute and relative paths, ls, mkdir, rmdir,touch, rm, cp, mv, echo, head, tail, cat, tac

a.

1. pwd(Present working directory)

InLinux pwd command displays the current working directory. It will give the whole path starting from the root to the current working directory.

Syntax:**pwd**



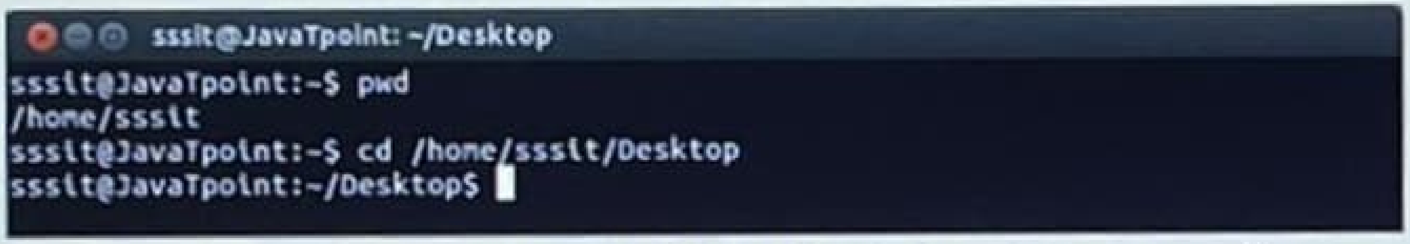
```
sssit@JavaTpoint:~$ pwd
/home/sssit
```

2. cd

The "cd" command stands for 'change directory' and this command is used to change the current directory i.e; the directory in which the user is currently working.

a) Change from current directory to a new directory

Syntax:
cd <dirname>
Example:
cd Desktop



```
sssit@JavaTpoint:~$ pwd
/home/sssit
sssit@JavaTpoint:~$ cd /home/sssit/Desktop
sssit@JavaTpoint:~/Desktop$
```

b) Change directory using absolute path

An absolute path is defined as specifying the location of a file or directory from the root directory (/). It mention whole path starting from root

Syntax:
cd <dirname>

Example:
cd /home/sssit/Desktop

The 'tail' command displays the last lines of a file. Its main purpose is to read the error message.

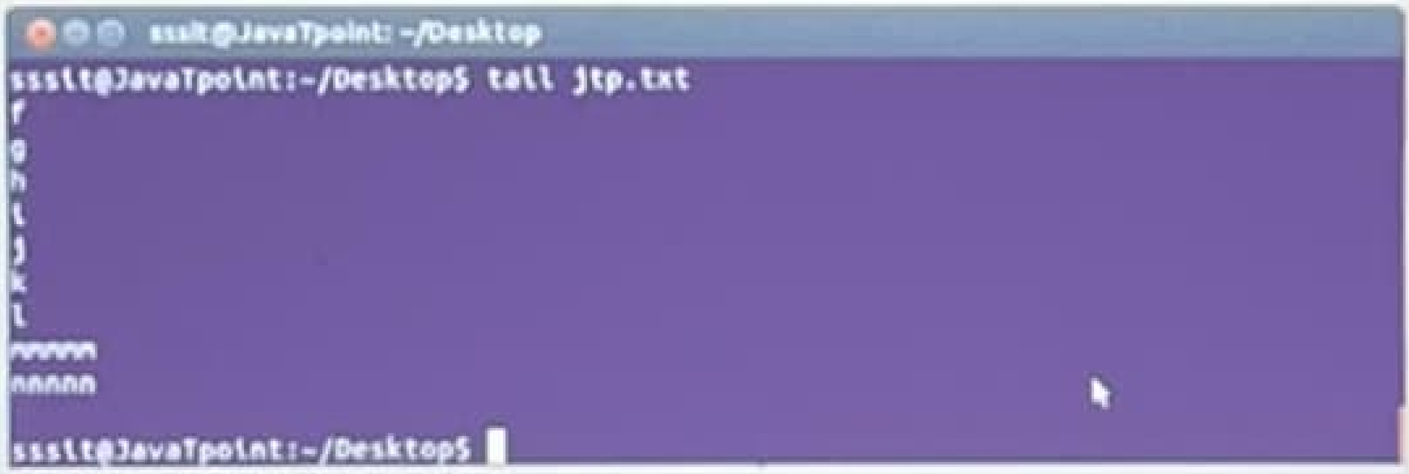
By default, it will also display the last ten lines of a file.

Syntax:

a)tail **<file** name>

Example:

tail jtp.txt



```
sssit@JavaTpoint:~/Desktop$ tail jtp.txt
f
g
h
i
j
k
l
mmmmm
nnnnn

sssit@JavaTpoint:~/Desktop$ 
```

b)Linux tail -n

The 'tail -n' option displays the specified number of lines.

Syntax:

```
tail -n<number> <file name>
```

Example:

```
tail –n 5 jtp.txt
```

8. cat

The 'cat' command can be used to display the content of a file.

Syntax:

```
a)cat <fileName>
```

Example:

```
cat jtp.txt
```

CD ..

g) Change from home directory and easily access to a long path

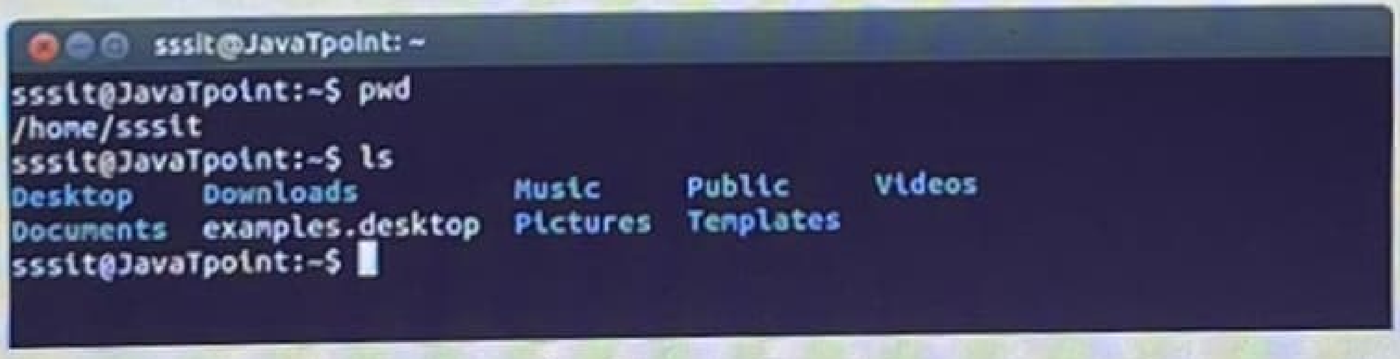
CD ~/<dirname>
Example
CD ~/Desktop

3. ls

The **ls**is the list command in Linux. It will show the full list or content of your directory. Just type ls and press enter key. The whole content will be shown.

Syntax:

a)ls



```
sssit@JavaTpoint:~$ pwd
/home/sssit
sssit@JavaTpoint:~$ ls
Desktop    Downloads         Music     Public     Videos
Documents  examples.desktop  Pictures  Templates
sssit@JavaTpoint:~$ 
```

b)ls -a

List the whole files in the directory including hidden files.

c)ls –l

Shows List in long list format.

d)ls –r

It is used to print the list in reverse order.

e)ls –R

It will display the content of the sub-directories also.

4. mkdir:

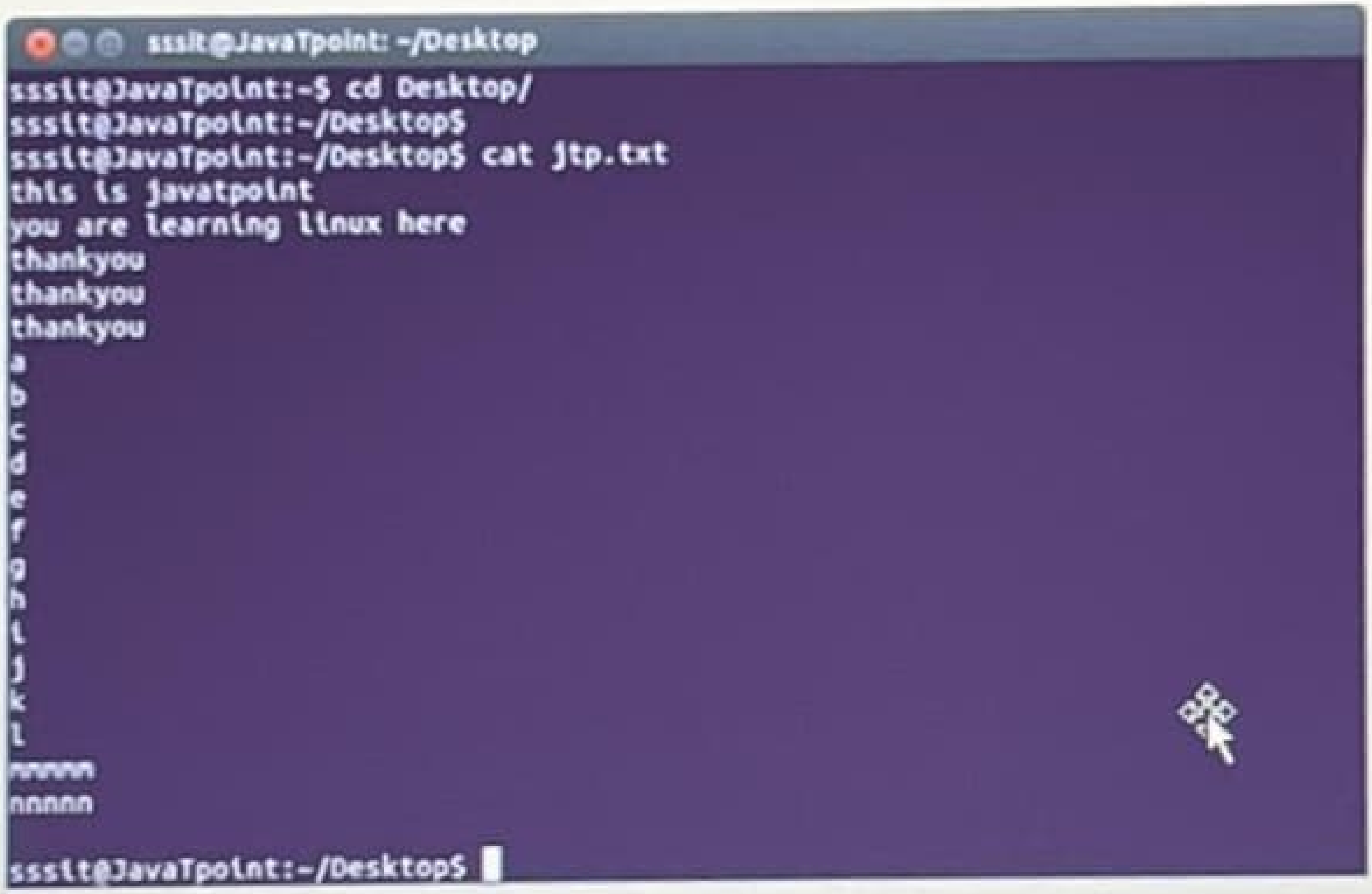
The mkdir stands for 'make directory'. mkdir command is used to create a new directory.

Syntax:

mkdir <dirname>

Example:

mkdir created



```
sssit@JavaTpoint:~$ cd Desktop/
sssit@JavaTpoint:~/Desktop$
sssit@JavaTpoint:~/Desktop$ cat jtp.txt
this is javatpoint
you are learning linux here
thankyou
thankyou
thankyou
a
b
c
d
e
f
g
h
i
j
k
l
nnnnn
nnnnn

sssit@JavaTpoint:~/Desktop$
```

b)To copy content of one file to another.

Syntax:

```
cat old_filename>new_filename
```

c)To concatenate content of multiple files into one.

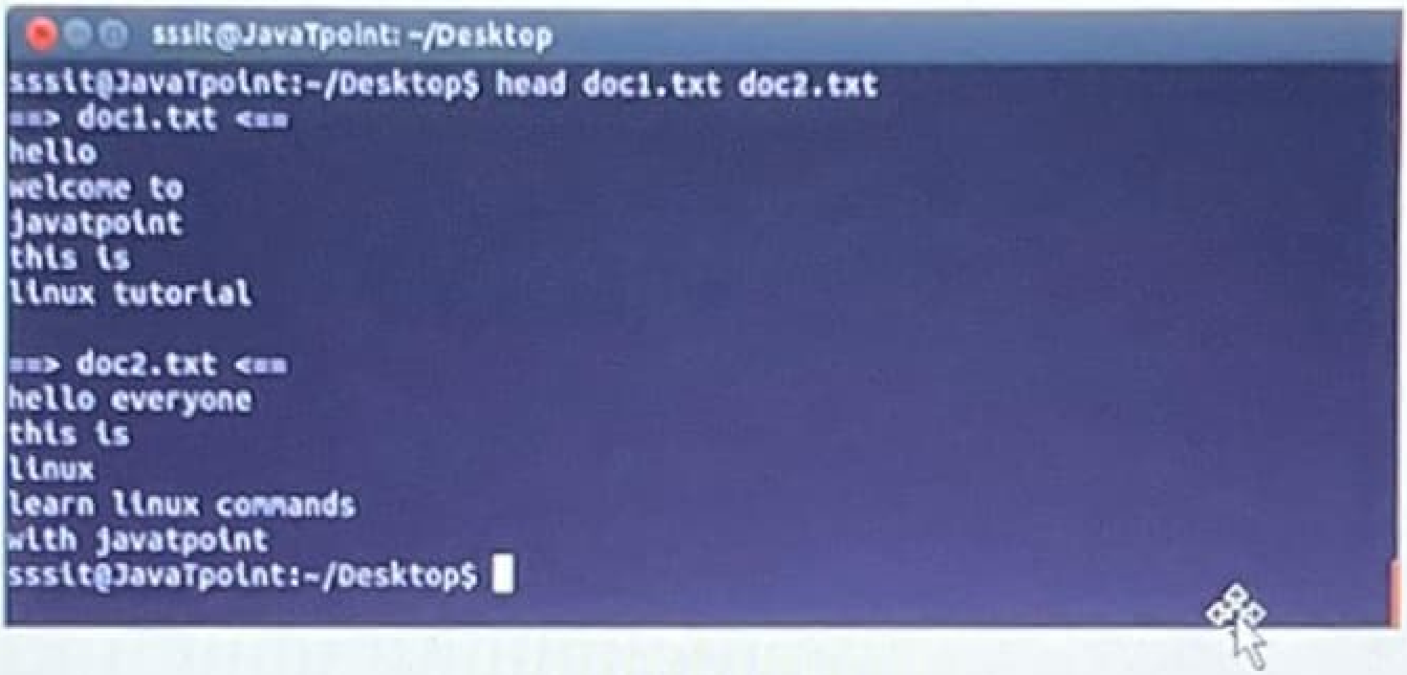
Syntax:

```
cat f1 f2 f3 >new_filename
```

9.echo

TO write messages into the file.

head doc1.txt doc2.txt



sssit@JavaTpoint: ~/Desktop

```
sssit@JavaTpoint:~/Desktop$ head doc1.txt doc2.txt
==> doc1.txt <==
hello
welcome to
javatpoint
this is
linux tutorial

==> doc2.txt <==
hello everyone
this is
linux
learn linux commands
with javatpoint
sssit@JavaTpoint:~/Desktop$
```

c)Linux head -n

The 'head -n' option displays specified number of lines.

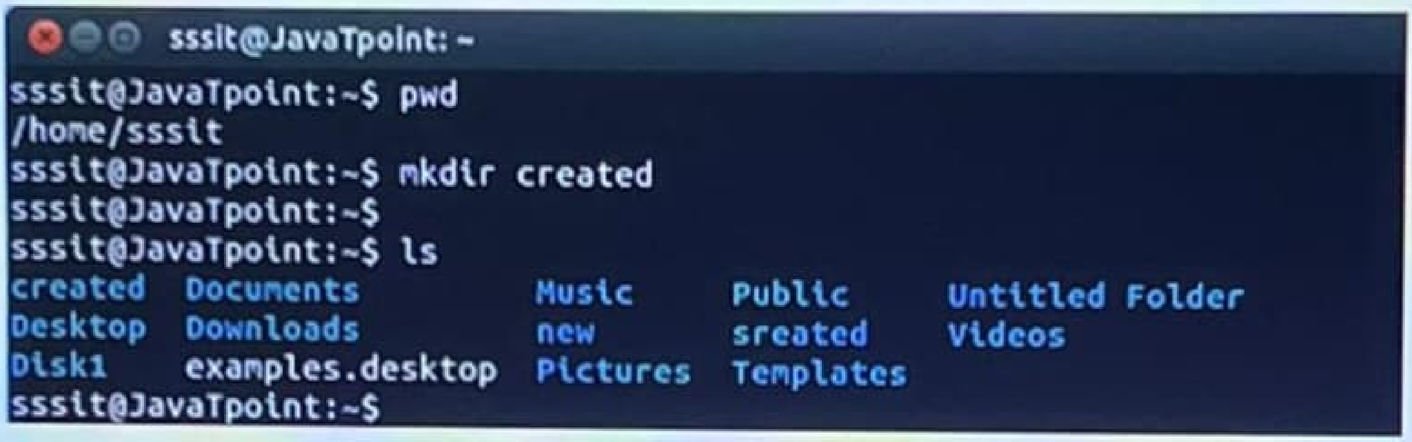
Syntax:

head -n **<file** name>

Example:

head –n 15 jtp.txt

7. tail

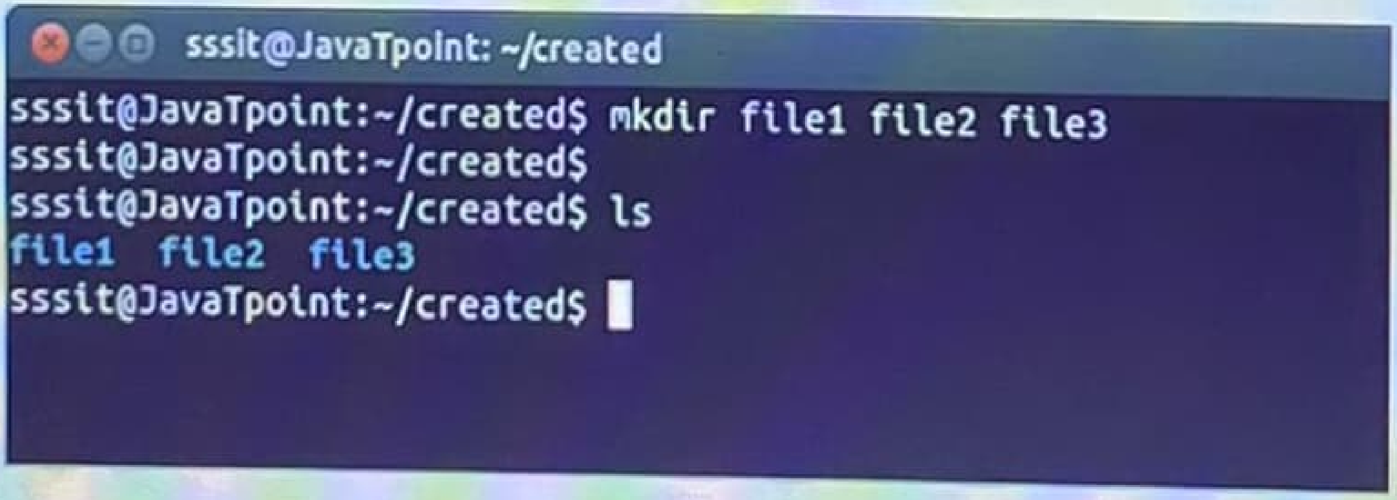


```
sssit@JavaTpoint: ~
sssit@JavaTpoint:~$ pwd
/home/sssit
sssit@JavaTpoint:~$ mkdir created
sssit@JavaTpoint:~$
sssit@JavaTpoint:~$ ls
created  Documents         Music     Public    Untitled Folder
Desktop  Downloads         new       sreated   Videos
Disk1    examples.desktop  Pictures  Templates
sssit@JavaTpoint:~$
```

Use ls command to see the new directory.

To make multiple directories

mkdir <dirname1> <dirname2> <dirname3> ...



```
sssit@JavaTpoint: ~/created
sssit@JavaTpoint:~/created$ mkdir file1 file2 file3
sssit@JavaTpoint:~/created$
sssit@JavaTpoint:~/created$ ls
file1  file2  file3
sssit@JavaTpoint:~/created$
```

5. **rmdir:**

2. touch

touch command is used to create empty files. You can update the modification and access time of each file with the help of touch command.

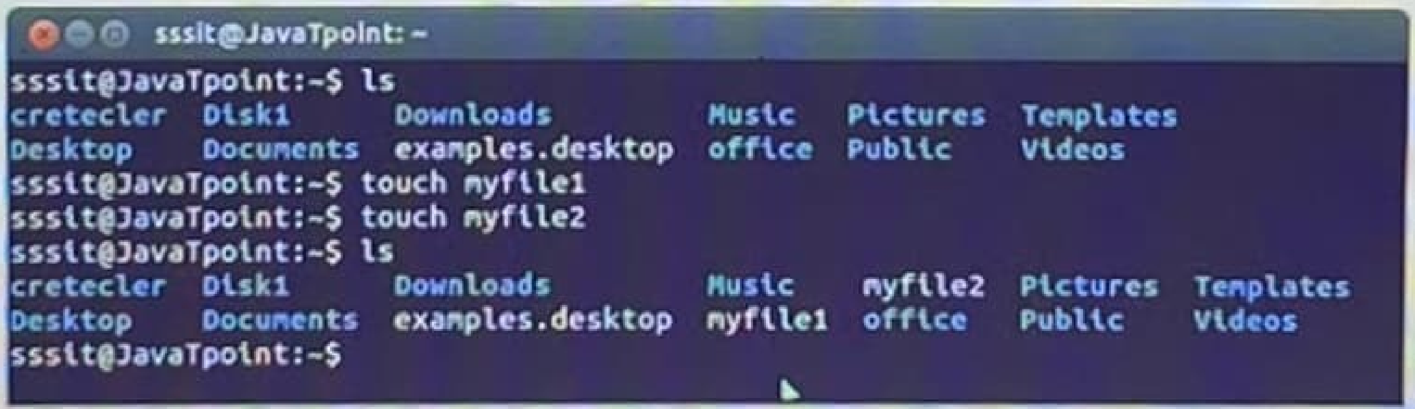
Syntax:

touch **<filename>**

Example:

touch myfile1

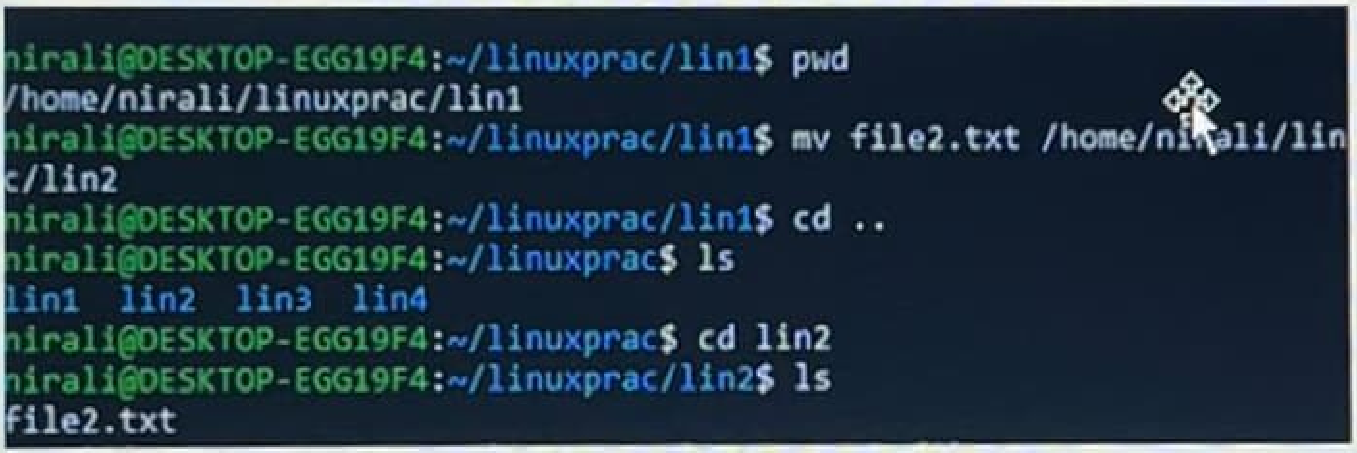
touch myfile2



```
sssit@JavaTpoint:~$ ls
cretecler  Disk1      Downloads         Music   Pictures  Templates
Desktop    Documents  examples.desktop  office  Public    Videos
sssit@JavaTpoint:~$ touch myfile1
sssit@JavaTpoint:~$ touch myfile2
sssit@JavaTpoint:~$ ls
cretecler  Disk1      Downloads         Music    myfile2  Pictures  Templates
Desktop    Documents  examples.desktop  myfile1  office   Public    Videos
sssit@JavaTpoint:~$
```

mv command is used to move existing file or directory from one location to another. It is also used to rename a file or directory.

mv<old filename><new filename>



```
nirali@DESKTOP-EGG19F4:~/linuxprac/lin1$ pwd
/home/nirali/linuxprac/lin1
nirali@DESKTOP-EGG19F4:~/linuxprac/lin1$ mv file2.txt /home/nirali/lin
c/lin2
nirali@DESKTOP-EGG19F4:~/linuxprac/lin1$ cd ..
nirali@DESKTOP-EGG19F4:~/linuxprac$ ls
lin1  lin2  lin3  lin4
nirali@DESKTOP-EGG19F4:~/linuxprac$ cd lin2
nirali@DESKTOP-EGG19F4:~/linuxprac/lin2$ ls
file2.txt
```

6. Head

The 'head' command displays the starting content of a file. By default, it displays starting 10 lines of any file.

Syntax:

Echo "message" >f1.txt

10.tac

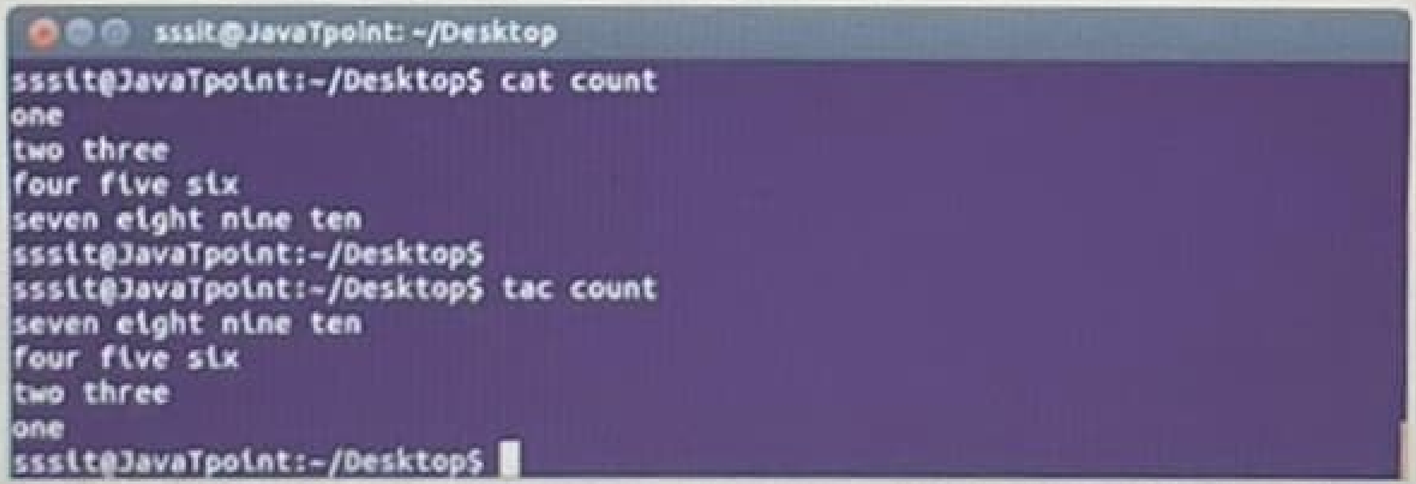
The 'tac' command is the reverse of the 'cat' command. It is also known as 'cat' backwards. It will display the file content in reverse order.

Syntax:

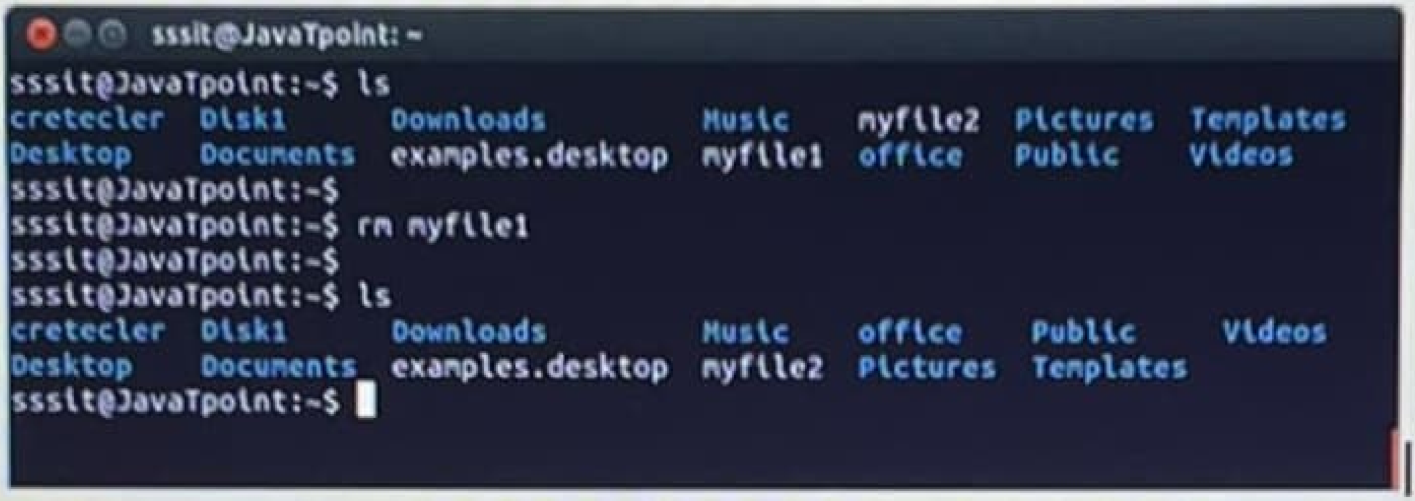
a)tac **<file** name>

Example:

tac count



```
sssit@JavaTpoint:~/Desktop$ cat count
one
two three
four five six
seven eight nine ten
sssit@JavaTpoint:~/Desktop$
sssit@JavaTpoint:~/Desktop$ tac count
seven eight nine ten
four five six
two three
one
sssit@JavaTpoint:~/Desktop$
```



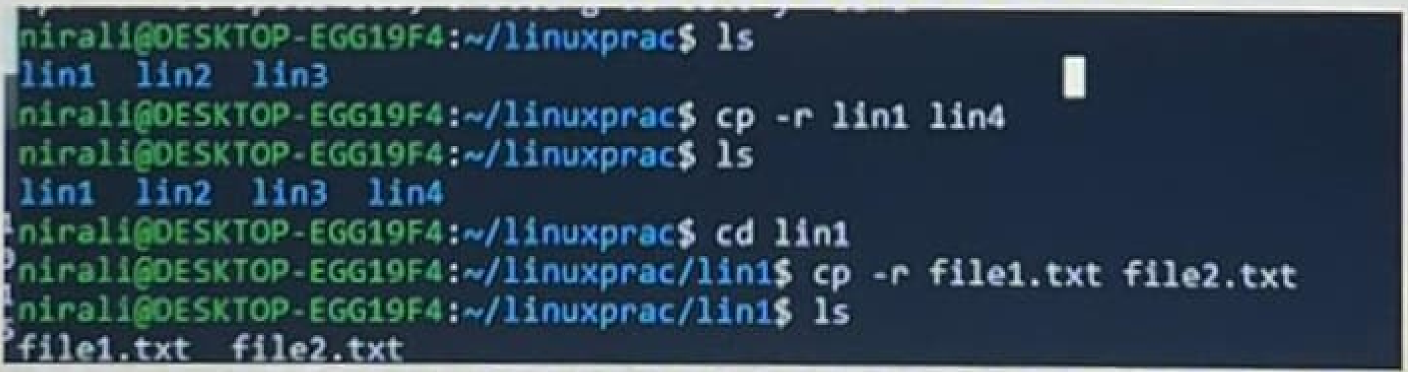
```
sssit@JavaTpoint:~$ ls
cretecler  Disk1      Downloads          Music    myfile2  Pictures  Templates
Desktop    Documents  examples.desktop   myfile1  office   Public    Videos
sssit@JavaTpoint:~$
sssit@JavaTpoint:~$ rm myfile1
sssit@JavaTpoint:~$
sssit@JavaTpoint:~$ ls
cretecler  Disk1      Downloads          Music    office   Public     Videos
Desktop    Documents  examples.desktop   myfile2  Pictures Templates
sssit@JavaTpoint:~$
```

4. cp -r

'cp' means copy. 'cp' command is used to copy a file or a directory.

To copy a file into the same directory syntax will be,

a)**cp -r <existing file name> <new file name>**



```
nirali@DESKTOP-EGG19F4:~/linuxprac$ ls
lin1  lin2  lin3
nirali@DESKTOP-EGG19F4:~/linuxprac$ cp -r lin1 lin4
nirali@DESKTOP-EGG19F4:~/linuxprac$ ls
lin1  lin2  lin3  lin4
nirali@DESKTOP-EGG19F4:~/linuxprac$ cd lin1
nirali@DESKTOP-EGG19F4:~/linuxprac/lin1$ cp -r file1.txt file2.txt
nirali@DESKTOP-EGG19F4:~/linuxprac/lin1$ ls
file1.txt  file2.txt
```

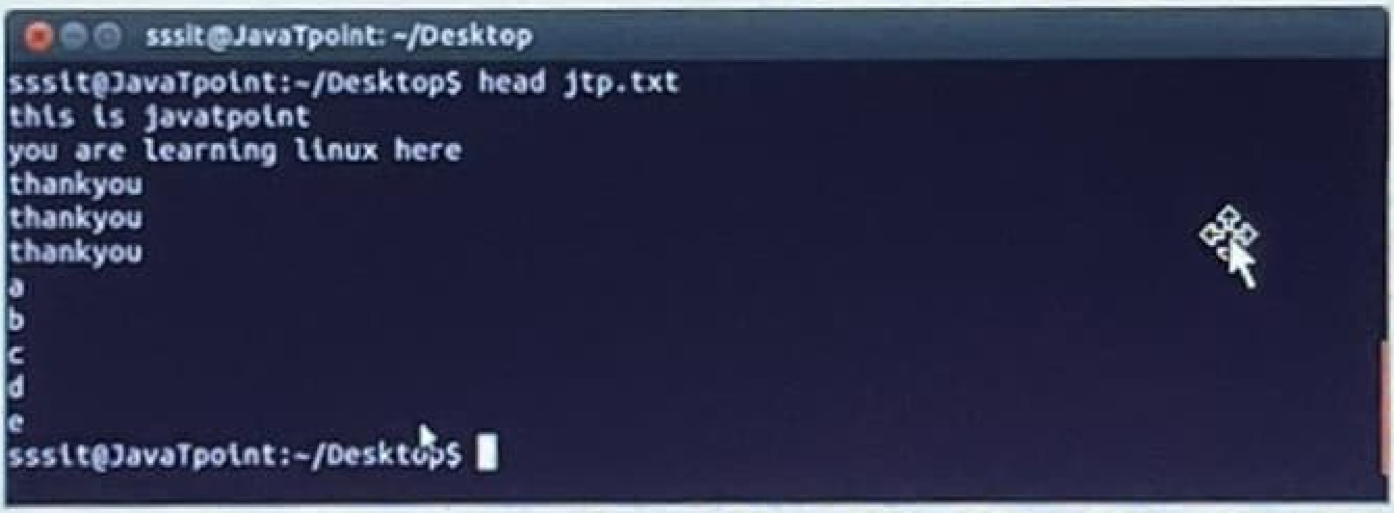
5. mv

Syntax:

a)head **<file** name>

Example:

head jtp.txt



```
sssit@JavaTpoint:~/Desktop$ head jtp.txt
this is javatpoint
you are learning linux here
thankyou
thankyou
thankyou
a
b
c
d
e
sssit@JavaTpoint:~/Desktop$
```

Head command for multiple files

If we'll write two file names then it will display first ten lines (in this case file has five lines only) of each file separated by a heading.

Syntax:

b)head **<file** name> **<file** name>

Example:

If you would like to create two files simultaneously, then your command will be:

Syntax:

```
touch<filename><filename >...
```

Example:

```
touch myfile1 myfile2
```

3. rm

The 'rm' means remove. This command is used to remove a file. The command line doesn't have a recycle bin or trash unlike other GUI's to recover the files. Hence, be very much careful while using this command. Once you have deleted a file, it is removed permanently.

Syntax:

```
        a)rm  -r<filename>
```

Example:

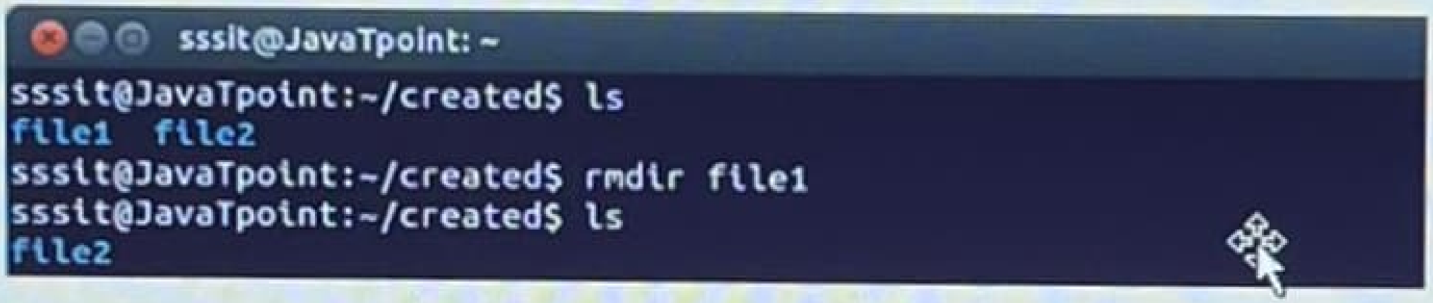
```
rm myfile1
```

This command is used to remove an empty directory.

Syntax:

rmdir <dirname>

Example: rmdir created



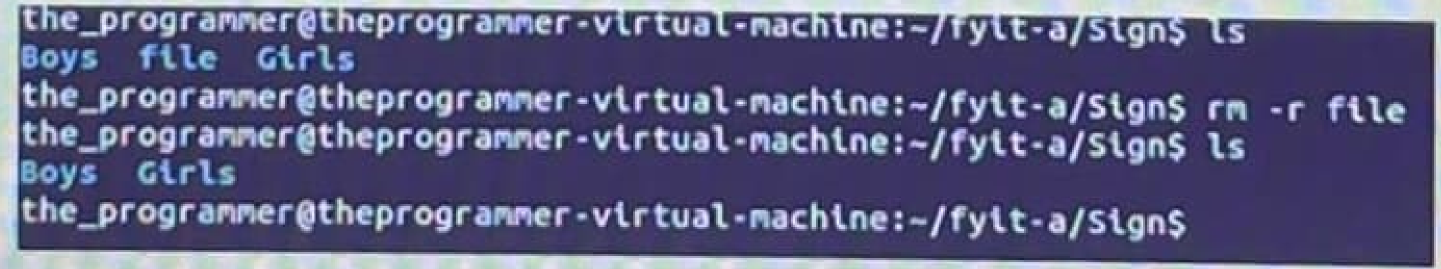
```
sssit@JavaTpoint: ~
sssit@JavaTpoint:~/created$ ls
file1  file2
sssit@JavaTpoint:~/created$ rmdir file1
sssit@JavaTpoint:~/created$ ls
file2
```

This command is used to remove a directory along with its subdirectories.

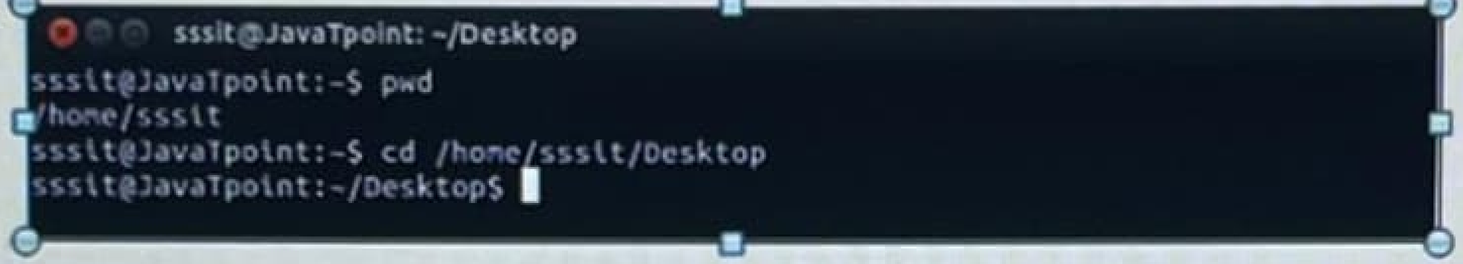
Syntax:

rm -r <dirname>

Example: rm -r file



```
the_programmer@theprogrammer-virtual-machine:~/fyit-a/Sign$ ls
Boys  file  Girls
the_programmer@theprogrammer-virtual-machine:~/fyit-a/Sign$ rm -r file
the_programmer@theprogrammer-virtual-machine:~/fyit-a/Sign$ ls
Boys  Girls
the_programmer@theprogrammer-virtual-machine:~/fyit-a/Sign$
```



```
sssit@JavaTpoint:~$ pwd
/home/sssit
sssit@JavaTpoint:~$ cd /home/sssit/Desktop
sssit@JavaTpoint:~/Desktop$
```

c)Change directory using relative path

Relative path is defined as the path related to the present working directly (pwd). It starts at your current directory and **never starts with a /**.

Syntax:

cd <dirname>

Example:

cd Desktop

d)Change to root directory

CD /

e)Change to current directory

CD .

f)Change to parent directory