

Assignment 2

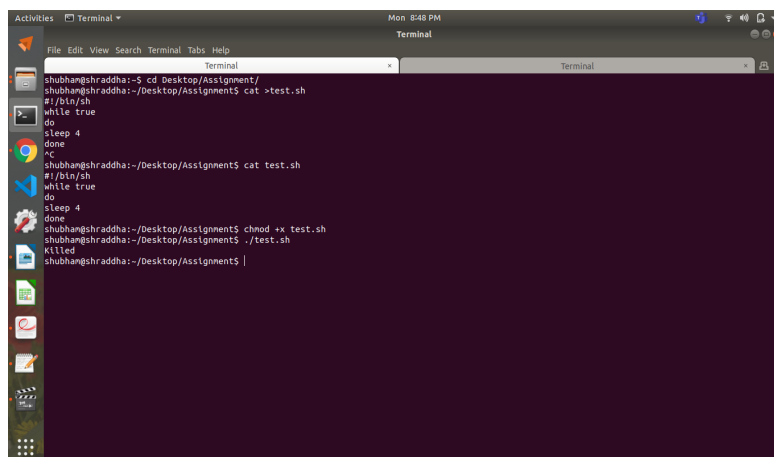
Name -Shraddha Tripathi

Q1. Make a script test.sh as below and execute it , open new terminal and kill this process using processId

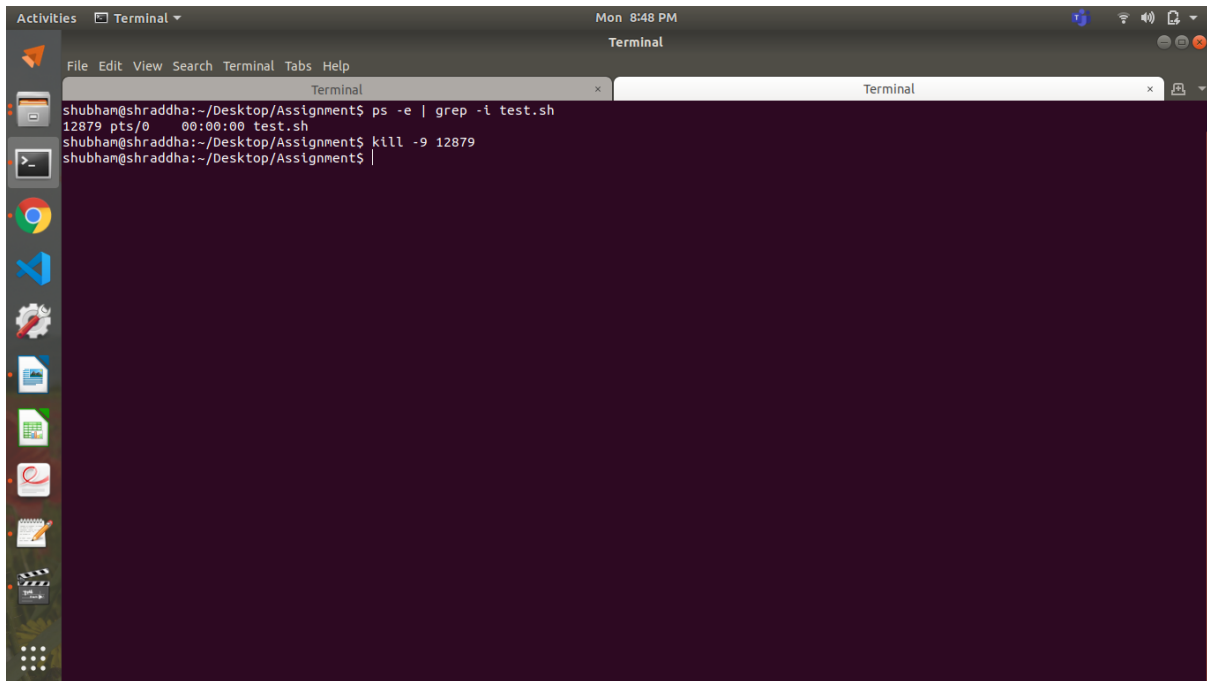
```
#!/bin/sh
while true
do
sleep 4
done
```

Sol:-

```
shubham@shraddha:~$ cd /Desktop/Assignment/
shubham@shraddha:~/Desktop/Assignment$ cat>test.sh
#!/bin/sh
while true
do
sleep 4
Done
shubham@shraddha:~/Desktop/Assignment$ cat test.sh
#!/bin/sh
while true
do
sleep 4
done
shubham@shraddha:~/Desktop/Assignment$ chmod +x test.sh
shubham@shraddha:~/Desktop/Assignment$ ./test.sh
killed
```



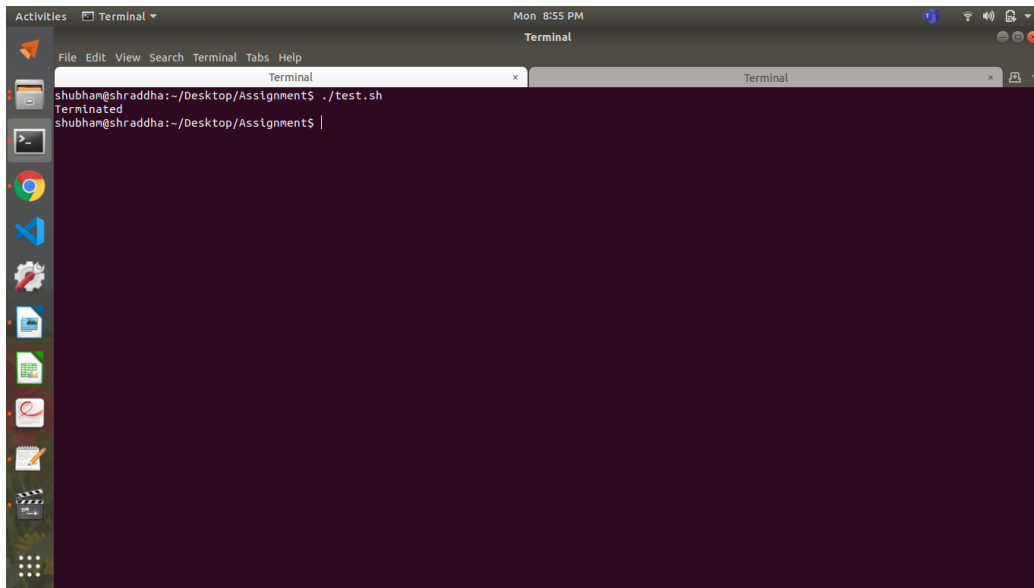
```
shubham@shraddha:~/Desktop/Assignment$ ps -ef | grep test.sh
12879 pts/0 00:00:00 test.sh
shubham@shraddha:~/Desktop/Assignment$ kill -9 12879
shubham@shraddha:~/Desktop/Assignment$
```



Q2. Again run test.sh and kill using name of process.

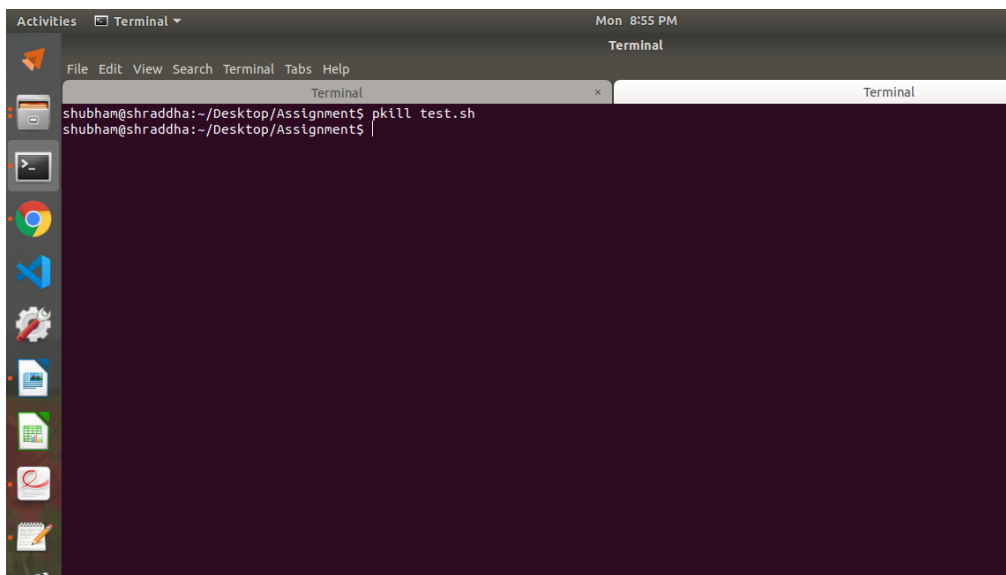
SOI-

```
shubham@shraddha:~$ cd /Desktop/Assignment/
shubham@shraddha:~/Desktop/Assignment$ cat test.sh
#!/bin/sh
while true
do
sleep 4
done
shubham@shraddha:~/Desktop/Assignment$ chmod +x test.sh
shubham@shraddha:~/Desktop/Assignment$ ./test.sh
Killed
```



shubham@shraddha:~/Desktop/Assignment\$ pkill test.sh

shubham@shraddha:~/Desktop/Assignment\$ kill -9 test.sh



Q3- Redirect both the output and error of a command to a file

Sol-

```
shubham@shraddha:~/Desktop/Assignment$ cat file10
```

```
hy i m shraddha
```

```
shubham@shraddha:~/Desktop/Assignment$ cat file11
```

```
shubham@shraddha:~/Desktop/Assignment$ cat >file11
```

```
How r u
```

```
^C
```

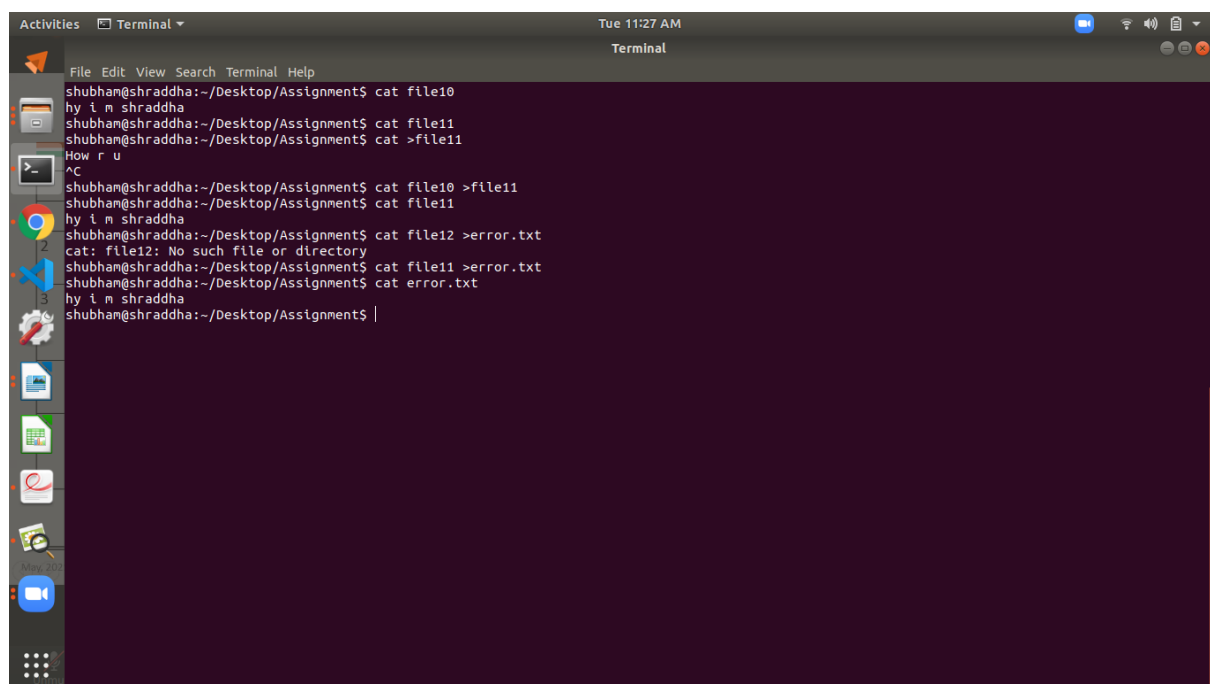
```
shubham@shraddha:~/Desktop/Assignment$ cat file10 >file11
```

```
shubham@shraddha:~/Desktop/Assignment$ cat file11
```

```
hy i m shraddha
```

```
shubham@shraddha:~/Desktop/Assignment$ cat file12 >error.txt
```

```
cat: file12: No such file or directory
```



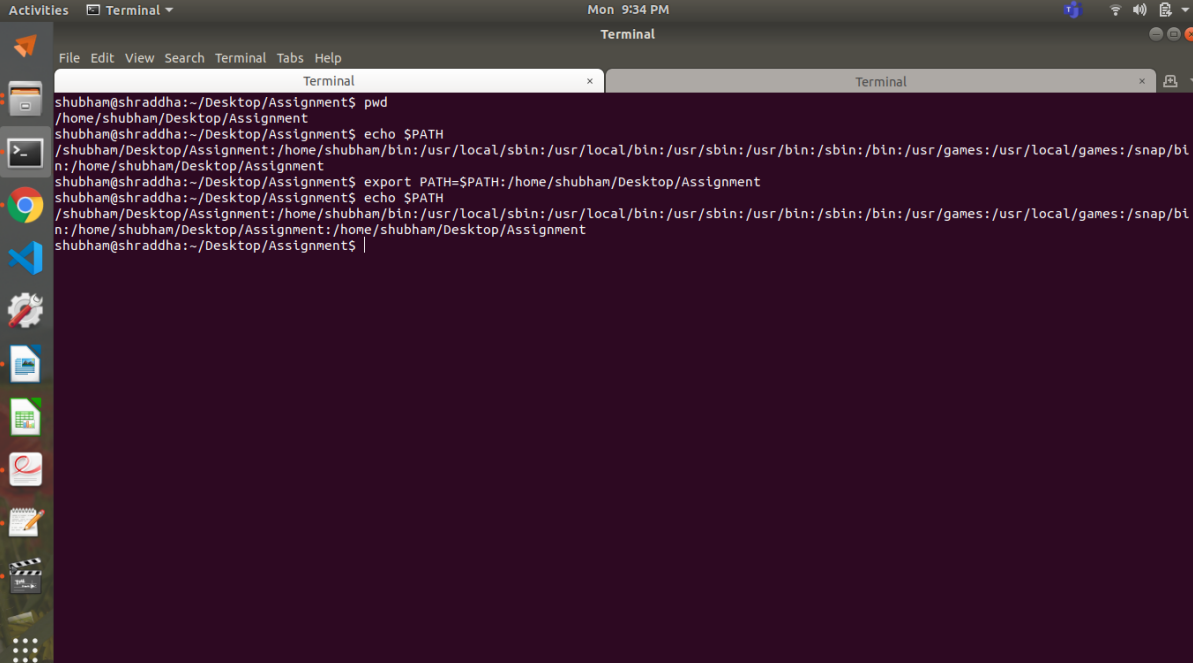
The screenshot shows a terminal window titled "Terminal" with a menu bar (File, Edit, View, Search, Terminal, Help) and a status bar (Tue 11:27 AM). The terminal displays the following commands and their outputs:

```
shubham@shraddha:~/Desktop/Assignment$ cat file10
hy i m shraddha
shubham@shraddha:~/Desktop/Assignment$ cat file11
shubham@shraddha:~/Desktop/Assignment$ cat >file11
How r u
^C
shubham@shraddha:~/Desktop/Assignment$ cat file10 >file11
shubham@shraddha:~/Desktop/Assignment$ cat file11
hy i m shraddha
shubham@shraddha:~/Desktop/Assignment$ cat file12 >error.txt
cat: file12: No such file or directory
shubham@shraddha:~/Desktop/Assignment$ cat file11 >error.txt
shubham@shraddha:~/Desktop/Assignment$ cat error.txt
hy i m shraddha
shubham@shraddha:~/Desktop/Assignment$
```

Q5-Include your current directory in the PATH environment variable using export command

Soln-

```
shubham@shraddha:~/Desktop/Assignment$ pwd
/home/shubham/Desktop/Assignment
shubham@shraddha:~/Desktop/Assignment$ echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin
shubham@shraddha:~/Desktop/Assignment$ export PATH=$PATH:/home/shubham/Desktop/Assignment
shubham@shraddha:~/Desktop/Assignment$ echo path
path
shubham@shraddha:~/Desktop/Assignment$ echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin:/home/shubham/Desktop/Assignment
shubham@shraddha:~/Desktop/Assignment$
```



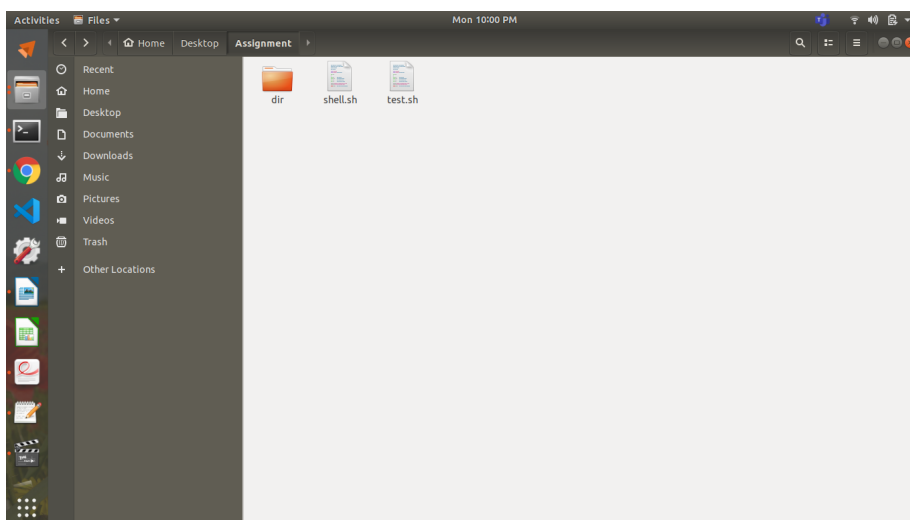
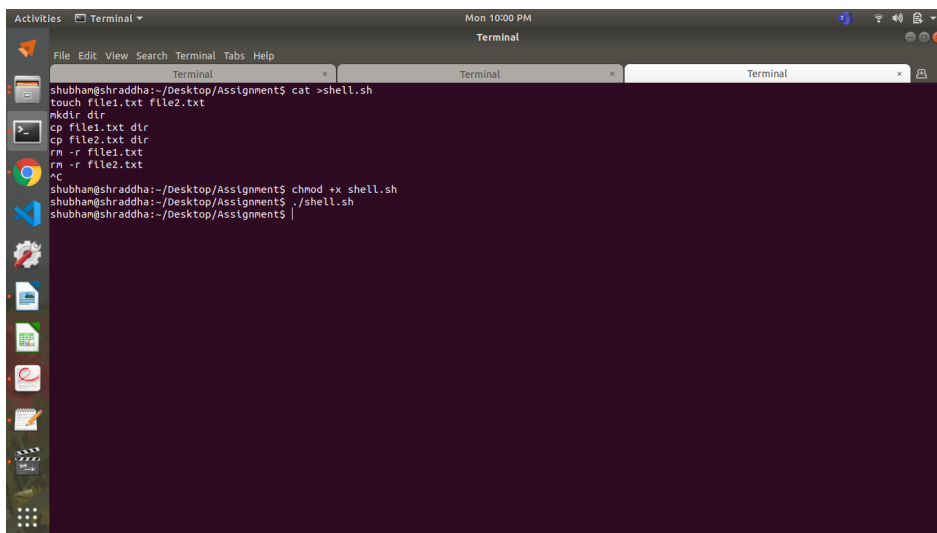
The screenshot shows a terminal window titled 'Terminal' with a menu bar (File, Edit, View, Search, Terminal, Tabs, Help) and a status bar (Mon 9:34 PM). The terminal displays the following commands and their outputs:

```
shubham@shraddha:~/Desktop/Assignment$ pwd
/home/shubham/Desktop/Assignment
shubham@shraddha:~/Desktop/Assignment$ echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin
shubham@shraddha:~/Desktop/Assignment$ export PATH=$PATH:/home/shubham/Desktop/Assignment
shubham@shraddha:~/Desktop/Assignment$ echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin:/home/shubham/Desktop/Assignment
shubham@shraddha:~/Desktop/Assignment$
```

Qus 6. Create 2 files “file1” and “file2”. Create a directory “dir”. Copy the files to the directory and then delete the files. Do so using shell script.

Sol-

```
shubham@shraddha:~/Desktop/Assignment$ cat shell.sh
touch file1.txt file2.txt
mkdir dir
cp file1.txt dir
cp file2.txt dir
rm -r file1.txt
rm -r file2.txt
shubham@shraddha:~/Desktop/Assignment$ chmod +x shell.sh
shubham@shraddha:~/Desktop/Assignment$ ./shell.sh
```



Qus 7. Take some input from keyboard and count number of lines you have given

Sol-

```
shubham@shraddha:~/Desktop/Assignment$ cat >file1.txt
```

```
hy
```

```
by
```

```
jiii
```

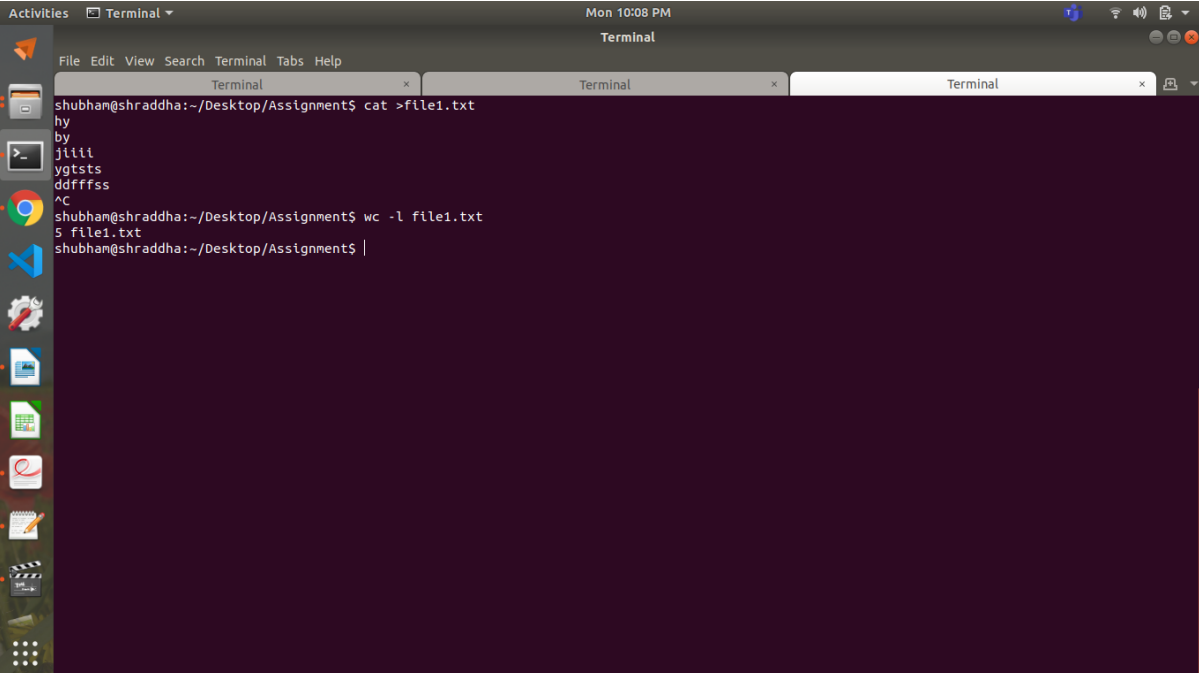
```
ygtsts
```

```
ddfffss
```

```
^C
```

```
shubham@shraddha:~/Desktop/Assignment$ wc -l file1.txt
```

```
5 file1.txt
```



The screenshot shows a terminal window with the following content:

```
shubham@shraddha:~/Desktop/Assignment$ cat >file1.txt
hy
by
jiii
ygtsts
ddfffss
^C
shubham@shraddha:~/Desktop/Assignment$ wc -l file1.txt
5 file1.txt
shubham@shraddha:~/Desktop/Assignment$ |
```

The terminal window has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', 'Tabs', and 'Help'. The title bar shows 'Terminal' and the system clock 'Mon 10:08 PM'. The left sidebar contains various application icons.

Qus 8- Write a script to see current date, time, username and current directory.

Sol-

```
shubham@shraddha:~/Desktop/Assignment$ date
```

```
Mon May 10 22:14:21 IST 2021
```

```
shubham@shraddha:~/Desktop/Assignment$ time
```

```
real 0m0.000s
```

```
user 0m0.000s
```

```
sys 0m0.000s
```

```
shubham@shraddha:~/Desktop/Assignment$ whoami
```

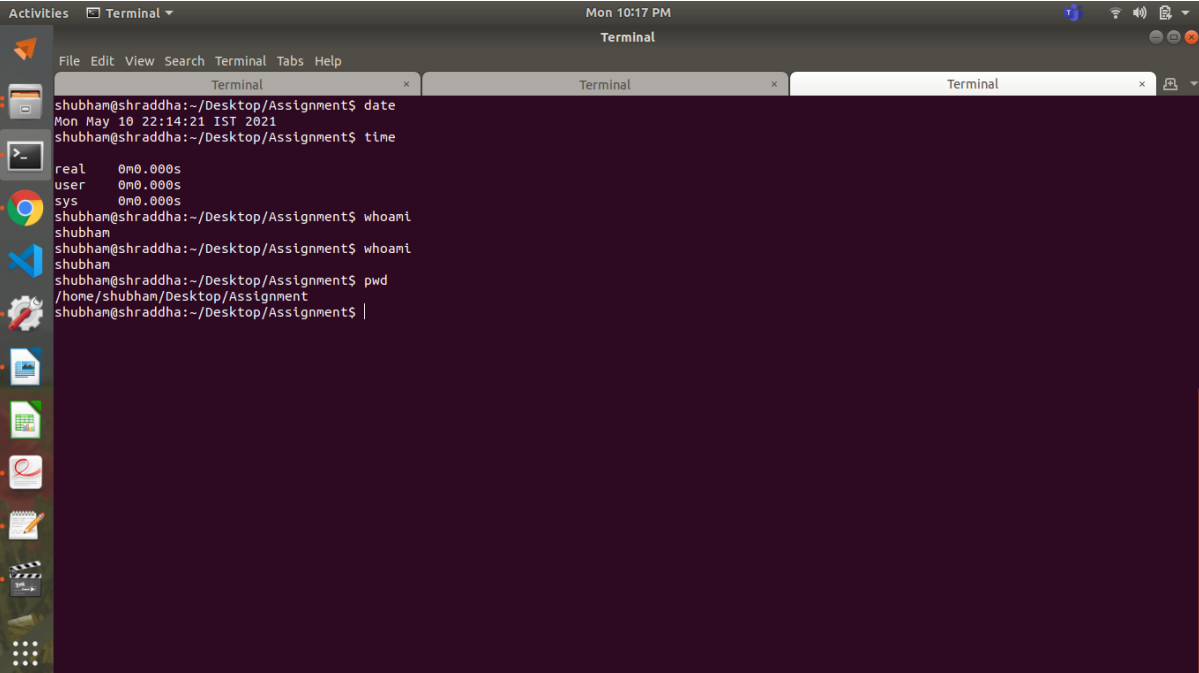
```
shubham
```

```
shubham@shraddha:~/Desktop/Assignment$ whoami
```

```
shubham
```

```
shubham@shraddha:~/Desktop/Assignment$ pwd
```

```
/home/shubham/Desktop/Assignmen
```



The screenshot shows a terminal window titled 'Terminal' with a menu bar (File, Edit, View, Search, Terminal, Tabs, Help) and a status bar (Mon 10:17 PM). The terminal contains the following text:

```
shubham@shraddha:~/Desktop/Assignment$ date
Mon May 10 22:14:21 IST 2021
shubham@shraddha:~/Desktop/Assignment$ time

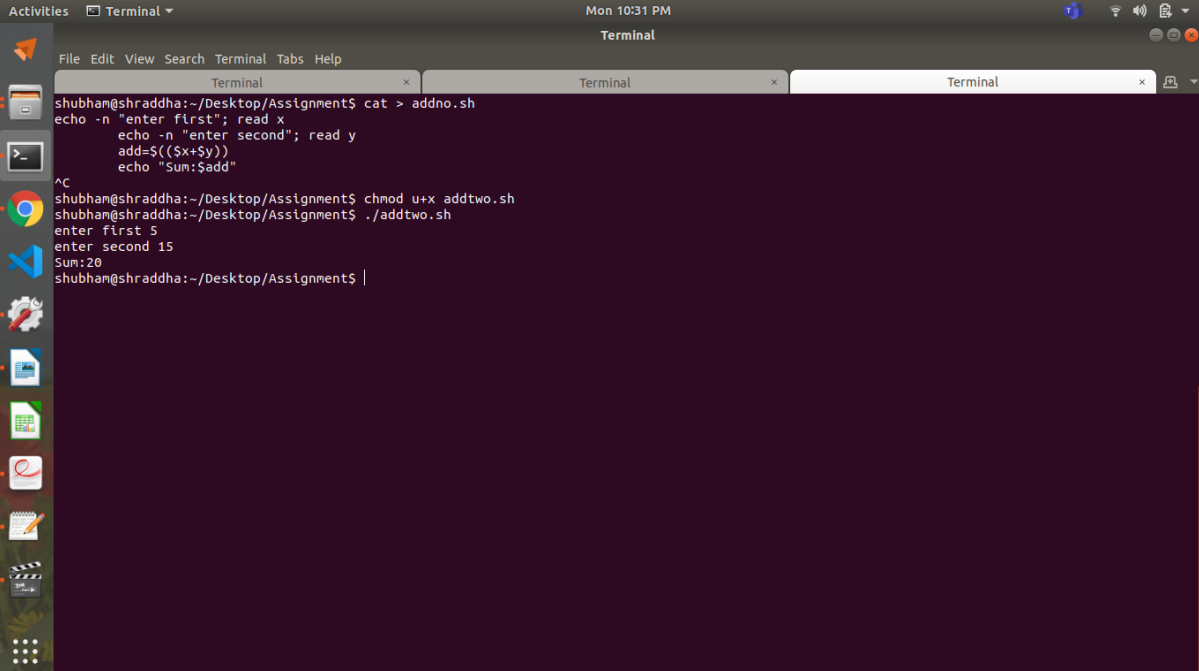
real    0m0.000s
user    0m0.000s
sys     0m0.000s
shubham@shraddha:~/Desktop/Assignment$ whoami
shubham
shubham@shraddha:~/Desktop/Assignment$ whoami
shubham
shubham@shraddha:~/Desktop/Assignment$ pwd
/home/shubham/Desktop/Assignment
shubham@shraddha:~/Desktop/Assignment$ |
```


Qus 9-Write shell script that will add two numbers, which are supplied as command line argument.

Sol-

```
shubham@shraddha:~/Desktop/Assignment$ cat > addno.sh
echo -n "enter first"; read x
    echo -n "enter second"; read y
    add=$((x+y))
    echo "Sum:$add"
```

```
shubham@shraddha:~/Desktop/Assignment$ chmod u+x addtwo.sh
shubham@shraddha:~/Desktop/Assignment$ ./addtwo.sh
enter first 5
enter second 15
Sum:20
```

A screenshot of a Linux terminal window. The window title is "Terminal" and it shows the command history. The user has created a file named "addno.sh" with the following content:

```
echo -n "enter first"; read x
echo -n "enter second"; read y
add=$((x+y))
echo "Sum:$add"
```

 The user has then run `chmod u+x addtwo.sh` and `./addtwo.sh`. The output of the script is:

```
enter first 5
enter second 15
Sum:20
```

 The terminal window has a dark background and a light-colored text. The user's prompt is `shubham@shraddha:~/Desktop/Assignment$`. The terminal window is part of a desktop environment with a sidebar on the left showing various application icons.

10. How to perform real number calculation in shell script and store result to third variable, let's say $a=5.66$, $b=8.67$, $c=a+b$?
(Hint: use bc command)

Sol-

```
shubham@shraddha:~/Desktop/Assignment$ cat > addusingbc.sh
#!/bin/sh
```

```
    echo -n "Enter first: "; read a
    echo -n "Enter second: "; read b
    c=`echo "$a+$b" |bc `
    echo $c
```

```
shubham@shraddha:~/Desktop/Assignment$ chmod u+x addusingbc.sh
```

```
shubham@shraddha:~/Desktop/Assignment$ ./addusingbc.sh
```

Enter first: 6

Enter second: 34

40

```
shubham@shraddha:~/Desktop/Assignment$ ./addusingbc.sh
```

Enter first: 56

Enter second: 123

179

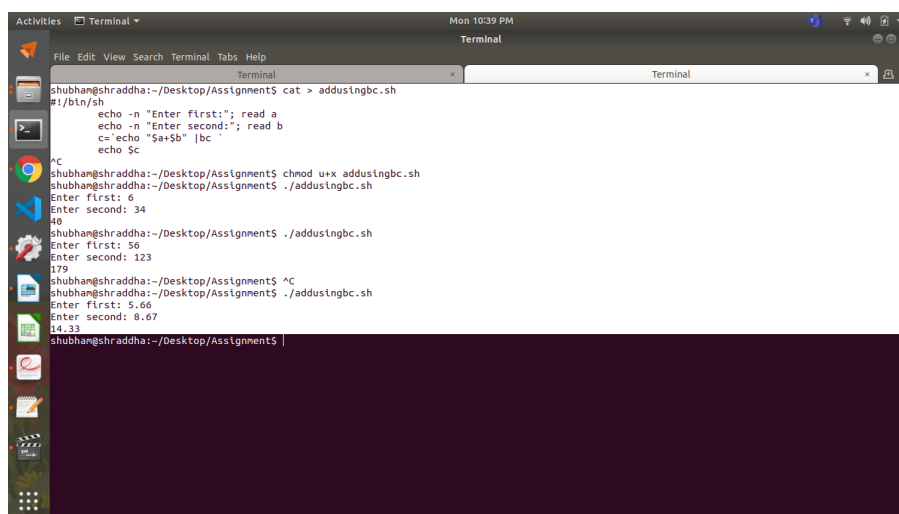
```
shubham@shraddha:~/Desktop/Assignment$ ^C
```

```
shubham@shraddha:~/Desktop/Assignment$ ./addusingbc.sh
```

Enter first: 5.66

Enter second: 8.67

14.33



```
Activities Terminal Mon 10:39 PM
Terminal
shubham@shraddha:~/Desktop/Assignment$ cat > addusingbc.sh
#!/bin/sh
    echo -n "Enter first: "; read a
    echo -n "Enter second: "; read b
    c=`echo "$a+$b" |bc `
    echo $c
^C
shubham@shraddha:~/Desktop/Assignment$ chmod u+x addusingbc.sh
shubham@shraddha:~/Desktop/Assignment$ ./addusingbc.sh
Enter first: 6
Enter second: 34
40
shubham@shraddha:~/Desktop/Assignment$ ./addusingbc.sh
Enter first: 56
Enter second: 123
179
shubham@shraddha:~/Desktop/Assignment$ ^C
shubham@shraddha:~/Desktop/Assignment$ ./addusingbc.sh
Enter first: 5.66
Enter second: 8.67
14.33
shubham@shraddha:~/Desktop/Assignment$
```

Submitted To:
Prachi Ma'am

- Submitted By:
Shraddha Tripathi

