**Assignment 2**

Q1. Make a script test.sh as below and execute it , open new terminal

and kill this process using process Id

#!/bin/sh

while true

do

sleep 4

done

Ans1. debjit@debjit:~$ ls

debjit   Documents  Music    Pictures  Templates  
Desktop  Downloads  Public    videos  
debjit@debjit:~$ nano test.sh

#!/bin/sh

while true

do

sleep 4

done  
debjit@debjit:~$ chmod +x test.sh  
debjit@debjit:~$ ./test.sh  
Killed

In terminal

debjit@debjit:~$ ps -ef | grep test.sh  
debjit      1915    1747  0 00:15 pts/1    00:00:00 /bin/sh ./test.sh  
debjit      1951    1933  0 00:17 pts/0    00:00:00 grep --color=auto test.sh  
debjit@debjit:~$ kill -9 1915

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

debjit@debjit:~$ ls

debjit Documents  Music Pictures  Templates  
 Desktop  Downloads  Public    videos  
 debjit@debjit:~$ nano test.sh

#!/bin/sh

while true

do

sleep 4

done  
 debjit@debjit:~$ chmod +x test.sh  
 debjit@debjit:~$ ./test.sh  
 Killed

Open new terminal

debjit@debjit:~$ kill -9 test.sh

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

debjit@debjit:~$ cat > file1  
hello my name is debjit  
debjit@debjit:~$ cat file1  
hello my name is debjit  
debjit@debjit:~$ cat file1 > file2  
debjit@debjit:~$ cat file2  
hello my name is debjit  
debjit@debjit:~$ cat file66 > error.txt  
debjit@debjit:~$ cat error.txt  
cat: file66: No such file or directory

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

debjit@debjit:~$ pwd  
/home/debjit  
debjit@debjit:~$ export PATH=$PATH  
debjit@debjit:~$ echo $PATH  
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games

:snap/bin  
debjit@debjit:~$ export PATH=$PATH:/home/debjit  
debjit@debjit:~$ echo $PATH  
usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games

:/snap/bin:/home/debjit

Q6. 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.

debjit@debjit:~$ touch file1 file2  
debjit@debjit:~$ mkdir dir  
debjit@debjit:~$ cat > temp.sh  
#!/bin/sh  
cp file1 dir  
cp file2 dir  
rm file1  
rm file2

echo”Log files copied”  
debjit@debjit:~$ chmod +x temp.sh  
debjit@debjit:~$ ./temp.sh  
Log files copied

Q7. Take some input from keyboard and count number of lines you have given.

debjit@debjit:~$ cat > file

hello  
how  
are  
you  
bye  
debjit@debjit:~$ nano input.sh  
echo "Enter the filename"  
read file  
c=`cat $file | wc -c`  
l=`grep -c "." $file`  
echo $l  
debjit@debjit:~$ chmod +x input.sh  
debjit@debjit:~$ ./input.sh  
 Enter the filename  
 file

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Q8. Write a script to see current date, time, username and current directory.

Ans8. debjit@debjit:~$ nano dtud.sh  
#!/bin/sh  
echo ”current date” :$(date)  
echo “user name” :$(whoami)  
echo “current directory” :$(pwd)  
debjit@debjit:~$ chmod +x dtud.sh  
debjit@debjit:~$ ./dtud.sh  
current date :Sunday 10 May 2021 10:23:29 AM IST  
user name :debjit  
current directory :/home/debjit

Q9. Write shell script that will add two numbers, which are supplied as command line argument.

debjit@debjit:~$ nano add.sh  
#!/bin/sh  
echo -n "enter first number: "; read x  
echo -n "enter second number: "; read y  
add=$(($x+$y))  
echo "Sum is: $add"  
debjit@debjit:~$ chmod +x add.sh  
debjit@debjit:~$ ./add.sh  
enter first number: 5  
enter second number: 10  
Sum is: 15

Q10. How to perform real number calculation in shell script and store result to third variable, lets say

a=5.66, b=8.67, c=a+b?

Ans10. debjit@debjit:~$ nano add.sh  
#!/bin/sh  
echo -n "enter first number: "; read a  
echo -n "enter second number: "; read b

c=`echo "$a+$b" |bc `

echo $c  
echo "Sum is: $add"  
debjit@debjit:~$ chmod +x add.sh  
debjit@debjit:~$ ./add.sh  
enter first number: 5  
enter second number: 10  
sum is: 15

debjit@debjit:~$ . /add.sh

enter first number: 6.66

enter second number: 9.64

sum is: 16.3