LAB 2 EXCERCISE 1 :

1.Try the following shell command

```
$ echo $HOME,$PATH
$ echo $MAIL
$ echo $USER,$SHELL,$TERM
```

answer:

```
$ echo $HOME,$PATH
/home/student,/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/
games:/usr/local/games:/snap/bin
$ echo $MAIL

$ echo $USER,$SHELL,$TERM
student,/bin/sh,xterm-256color
```

2.Try the following snippet,which illustrate the differece between
and environment variable.

```
$ firstname=rakesh
$ lstname=sharma
$ echo $firstname $lastname
rakesh sharma
$ export lastname="lastname"
$ sh
control+D
$ echo $firstname $lastname
```

Answer:

```
$ firstname=mohammad
$ lstname=tofik
$ echo $firstname $lastname
mohammad tofik
$ export lastname="lastname"
$ sh
control+D
$ echo $firstname $lastname
mohammad tofik
```

LAB 2 EXCERCISE 2 :

1.Try the following,which illustrates he usage of ps:

```
$(sleep 10; echo done) &
$ps
```

Answer :

```
$ (sleep 10; echo done) &
$ done
ps
  PID TTY          TIME CMD
 8343 pts/0    00:00:00 sh
 8355 pts/0    00:00:00 ps
[1] + Done                    (sleep 10; echo done)
```

```
$ ps
  PID TTY          TIME CMD
 8343 pts/0    00:00:00 sh
 8503 pts/0    00:00:00 ps
```

2.Try the fllowing,which illustrates the usage of kill:

```
$(sleep 10; echo done) &
$kill pid
```

Answer :

```
$ (sleep 10; echo done)&
$ done
kill
sh: 7: kill: Usage: kill [-s sigspec | -signum | -sigspec] [pid | job]... or
kill -l [exitstatus]
[1] + Done                       (sleep 10; echo done)

$ ps
  PID TTY          TIME CMD
 8343 pts/0    00:00:00 sh
 8512 pts/0    00:00:00 ps
$ kill 8503
sh: 25: kill: No such process

$ kill
sh: 2: kill: Usage: kill [-s sigspec | -signum | -sigspec] [pid | job]... or
kill -l [exitstatus]
$ done
```

3.Try the following,which illustrates the usage of wait:

```
$(sleep 10; echo done) &
$(sleep 10; echo done) &
$echo done 3;wait;echo done 4
```

Answer :

```
$ (sleep 10; echo done 1)&
$ done 1
wait
[1] + Done                       (sleep 10; echo done 1)
$ (sleep 10; echo done 2)&
$ done 2
wait
[1] + Done                       (sleep 10; echo done 2)
$ echo done 3; wait;echo done 4
done 3
done 4
```

LAB 2 EXCERCISE 3 :

1.List all the files under given input diretory,whose extension
has only one character.

Answer :

```
$ cat>script.sh
echo " Files that has extension only one character = `ls *.?`"
$ ./script.sh
 Files that has extension only one character = pgm1.c
pgm2.t
pgm3.s
```

2.Write a shell script that that accepts two commandline prameter.First Parameter indicates the directory and second parameter indicates the regular expression.The script should display alla the files and directories in the directory specified in the first documents matchinf the format specified in the second argument.

```
$cat>script3.sh
cd $1
ls | grep $2
$chmod +x script3.sh
$./script3.sh ~/lab2/ a
a.txt
```

3.Count the number of users logged on to the system ,display the
the output as number of users logged into the system.

Answer :

```
$cat > script3.sh
echo number of users logged into the system are `who | wc -l`
$ chmod +x script3.sh
$ ./script3.sh
number of users logged into the system are 1
```

4.Count the only number of files in the current directory

Answer:

```
$  cat > script4.sh
echo the number of files in the current directory is `ls -l | grep "^-" | wc -l`
$ chmod +x script4.sh
$ ./script4.sh
the number of files in the current directory is 5
```

5.Write a shell script that take two sorted numeric files as input and produce a single sorted numeric file without any duplicate document.

Answer :

```
$cat >file1.txt
1
2
3
4
```

```
$cat >file2.txt
5
6
7
8
$cat > script3.sh
cat $1 > merge
cat $1 >> merge
sort -n merge | uniq > sorted merged
cat sorted_merged
$chmod +x script3.sh
$./script3.sh file1.txt file2.txt
1
2
3
4
5
6
7
8
```

6.write a shell script that acepts two commandline argument.First argument indicates format of the file and the second argument indicates the destination directory.The script should copy all the files as specified in the first argument to the location indicated by the second argument.Also try script where the destination directory name has space in it.

Answer :

```
$cat>script4.sh
cp `ls *$1` $2
$chmod +x script4.sh
$./script4.sh .sh ./test
$cd test
$ls
pgm2.t pgm3.s
a.txt script3.sh
```