

## Lab exercise 1

1)

```
190905104@lplab-Lenovo-Product:~$ echo $HOME, $PATH
/home/190905104, /home/190905104/bin:/home/190905104/.local/bin:/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin
190905104@lplab-Lenovo-Product:~$ echo $MAIL
190905104@lplab-Lenovo-Product:~$ echo $USER, $SHELL, $TERM
190905104, , xterm-256color
190905104@lplab-Lenovo-Product:~$
```

2)

```
190905104@lplab-Lenovo-Product:~$ firstname=Parth
190905104@lplab-Lenovo-Product:~$ lastname=Shukla
190905104@lplab-Lenovo-Product:~$ echo $firstname $lastname
Parth Shukla
190905104@lplab-Lenovo-Product:~$ export lastname
LibreOffice Writer -Lenovo-Product:~$ sh
$ ^[[A^[[A^[[B^[[B
sh: 1: : not found
$ echo $firstname $lastname
Shukla
$
190905104@lplab-Lenovo-Product:~$ echo $firstname $lastname
Parth Shukla
190905104@lplab-Lenovo-Product:~$
```

3)

```
190905104@lplab-Lenovo-Product:~$ ./script.sh Parth Shukla
LibreOffice Calc his script is ./script.sh
the first argument is Parth
list of arguments Parth Shukla
script places date in a temporary file
called Parth.5129
Parth.5129
190905104@lplab-Lenovo-Product:~$
```

## Lab exercise 2

1) and 2)

```
190905104@lplab-Lenovo-Product:~$ (sleep 10; echo done) &
[1] 5195
190905104@lplab-Lenovo-Product:~$ ps
  PID TTY          TIME CMD
 5172 pts/19    00:00:00 bash
 5195 pts/19    00:00:00 bash
 5196 pts/19    00:00:00 sleep
 5197 pts/19    00:00:00 ps
190905104@lplab-Lenovo-Product:~$ done
[1]+  Done                  ( sleep 10; echo done )
190905104@lplab-Lenovo-Product:~$ (sleep 10; echo done) &
[1] 5199
190905104@lplab-Lenovo-Product:~$ kill 5199
190905104@lplab-Lenovo-Product:~$
```

3)

```
190905104@lplab-Lenovo-Product:~$ (sleep 10; echo done1) &
[1] 5244
190905104@lplab-Lenovo-Product:~$ (sleep 10; echo done2) &
[2] 5246
190905104@lplab-Lenovo-Product:~$ echo done3;wait; echo done4
done3
done1
[1]-  Done                  ( sleep 10; echo done1 )
done2
[2]+  Done                  ( sleep 10; echo done2 )
done4
190905104@lplab-Lenovo-Product:~$
190905104@lplab-Lenovo-Product:~$
```

End questions

1)

```
190905104@lplab-Lenovo-Product:~/lab2$ cat > q1.sh
ls *.*
190905104@lplab-Lenovo-Product:~/lab2$
```

Output:

```
190905104@lplab-Lenovo-Product:~/lab2$ chmod +x q1.sh
190905104@lplab-Lenovo-Product:~/lab2$ ./q1.sh
example.c
```

2)

```
190905104@lplab-Lenovo-Product:~/lab2$ cat > q2.sh
cd $1
ls *$2*
190905104@lplab-Lenovo-Product:~/lab2$
```

Output:

```
190905104@lplab-Lenovo-Product:~/lab2$ chmod +x q2.sh
190905104@lplab-Lenovo-Product:~/lab2$ ./q2.sh /home/190905104/lab2 sh
q1.sh q2.sh
190905104@lplab-Lenovo-Product:~/lab2$
```

3)

```
190905104@lplab-Lenovo-Product:~/lab2$ cat > q3.sh
echo Number of users:
who | wc -l
190905104@lplab-Lenovo-Product:~/lab2$
```

Output:

```
190905104@lplab-Lenovo-Product:~/lab2$ chmod +x q3.sh
190905104@lplab-Lenovo-Product:~/lab2$ ./q3.sh
Number of users:
1
```

4)

```
190905104@lplab-Lenovo-Product:~/lab2$ cat > q4.sh  
ls | wc -l
```

Output:

```
190905104@lplab-Lenovo-Product:~/lab2$ chmod +x q4.sh  
190905104@lplab-Lenovo-Product:~/lab2$ ./q4.sh  
5  
190905104@lplab-Lenovo-Product:~/lab2$
```

5)

```
190905104@lplab-Lenovo-Product:~/lab2$ cat > q5.txt  
echo files to be merged $1 $2  
cat $1 $2 > merged.txt  
sort -nu merged.txt
```

Output:

```
190905104@lplab-Lenovo-Product:~/lab2$ cat > file1.txt  
1  
3  
5  
7  
9  
190905104@lplab-Lenovo-Product:~/lab2$ cat > file2.txt  
2  
4  
6  
8  
10  
190905104@lplab-Lenovo-Product:~/lab2$ ./q5.sh file1.txt file2.txt  
files to be merged file1.txt file2.txt  
1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
190905104@lplab-Lenovo-Product:~/lab2$
```

6)

```
190905104@lplab-Lenovo-Product:~/lab2$ cat > q6.sh  
ls *.$1  
echo to be copied to $2  
cp *.$1 $2
```

Output:

```
190905104@lplab-Lenovo-Product:~/lab2$ chmod +x q6.sh
190905104@lplab-Lenovo-Product:~/lab2$ ./q6.sh cpp /home/190905104/lab2/Copied
move1.cpp  move2.cpp
to be copied to /home/190905104/lab2/Copied
190905104@lplab-Lenovo-Product:~/lab2$ cd Copied/
190905104@lplab-Lenovo-Product:~/lab2/Copied$ ls
move1.cpp  move2.cpp
190905104@lplab-Lenovo-Product:~/lab2/Copied$ █
```