Lap2:

1. Create a script that asks for user name then send a greeting to him.

```
#!/bin/bash
echo "Enter Your Name : "
read username
echo "Hello , $username"

ghx@ghx:~$ source newfile
Enter Your Name :
Ghada
Hello , Ghada
ghx@ghx:~$
```

2. Create a script called s1 that calls another script s2 where:

a. In s1 there is a variable called x, it's value 5

b. Try to print the value of x in s2 by two different ways.

```
#!usr/bin/bash
x=5
./sh2.sh $x
~
~
```

```
#!/usr/bin/bash

echo "value of x using position argument : $1"
echo "value of x using env variable : $x"
~
ghx@ghx:~$ source sh2
value of x using position argument :
value of x using env variable : 5
```

3. Create a script called mycp where:

a. It copies a file to another

```
#!/bin/bash
if [ "$#" -eq 2 ]; then
  cp "$1" "$2"
elif [ "$#" -gt 2 ]; then
  dir_copy="${@: -1}"
  cp "${@:1:$#-1}" "$dir_copy"
else
  echo "something else"
fi
```

```
something else
ghx@ghx:~$ script.sh myfile copydir
ghx@ghx:~$ cd copydir
ghx@ghx:~/copydir$ ls
myfile
```

b. It copies multiple files to a directory.

```
ghx@ghx:~$ script.sh myfile newfile copydir
ghx@ghx:~$ ls copydir/
myfile  newfile
ghx@ghx:~$
```

4. Create a script called mycd where:
a. It changed directory to the user home directory, if it is called without arguments.
b. Otherwise, it change directory to the given directory.

```
#!/bin/bash
if [ "$#" -eq 0 ]; then
  cd ~
else
  cd "$1"
fi
```

```
ghx@ghx:~$ source mycd.sh Desktop
ghx@ghx:~/Desktop$ course mycd.sh
course: command not found
ghx@ghx:~/Desktop$ source mycd.sh
ghx@ghx:~$
```

5. Create a script called myls where:
a. It lists the current directory, if it is called without arguments.
b. Otherwise, it lists the given directory.

```
#!/bin/bash
if [ "$#" -eq 0 ]; then
  ls
else
  ls "$1"
fi
```

```
ghx@ghx:~$ chmod +x myls.sh
ghx@ghx:~$ myls.sh
copydir    grading_system.sql  myfile    Public     sr
Desktop    iti_laps            myls.sh   script.sh  st
Documents  Music               newfile   sh1        Te
Downloads  mycd.sh             Pictures  sh2        te
ghx@ghx:~$ myls.sh Documents
advaced_sql_tasks  rhel-9.5-x86_64-boot.iso
iti-9months        VMware-Workstation-Full-17.6.2-244
iti-laps
```

6. Enhance the above script to support the following options individually:
a. –l: list in long format
b. –a: list all entries including the hiding files.
c. –d: if an argument is a directory, list only its name
d. –i: print inode number
e. –R: recursively list subdirectories

```
#!/bin/bash

ls_command="ls"

opt="$1"
shift

if [[ "$opt" == *"l"* ]]; then
  ls_command+=" -l"
fi
if [[ "$opt" == *"a"* ]]; then
  ls_command+=" -a"
fi
if [[ "$opt" == *"d"* ]]; then
  ls_command+=" -d"
fi
if [[ "$opt" == *"i"* ]]; then
  ls_command+=" -i"
fi
if [[ "$opt" == *"R"* ]]; then
  ls_command+=" -R"
fi

if [ "$#" -eq 0 ]; then
  $ls_command
else
  $ls_command "$1"

fi
```

Bonus: enhance the above script to support the following Synopsis:
myls -option1 –option2
myls –option2 –option1
myls –option1option2
myls –option2option1
7. Create a script called mytest where:
a. It check the type of the given argument (file/directory)
b. It check the permissions of the given argument (read/write/execute)
8. Create a script called myinfo where:
a. It asks the user about his/her logname.
b. It print full info about files and directories in his/her home directory
c. Copy his/her files and directories as much as you can in /tmp directory.

d. Gets his current processes status.