

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

```
mariam@mariam-Latitude-E6430:~$ vi greeting.sh
mariam@mariam-Latitude-E6430:~$ chmod +x greeting.sh
mariam@mariam-Latitude-E6430:~$ ./greeting.sh
hi there!
```

- 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.

```
mariam@mariam-Latitude-E6430:~$ vi s1.sh
mariam@mariam-Latitude-E6430:~$ chmod +x s1.sh s2.sh
mariam@mariam-Latitude-E6430:~$ ./s1.sh

5

#!/bin/bash
export x
x=5
./s2.sh
~

echo $x
~

#!/bin/bash
export x
x=5
./s2.sh $x
echo $1
```

- 3. Create a script called mycp where:
 - a. It copies a file to another
 - b. It copies multiple files to a directory.

```
mariam@mariam-Latitude-E6430:~$ vi file1.txt
mariam@mariam-Latitude-E6430:~$ vi file2.txt
mariam@mariam-Latitude-E6430:~$ vi ./mycp.sh
mariam@mariam-Latitude-E6430:~$ chmod +x mycp.sh
mariam@mariam-Latitude-E6430:~$
mariam@mariam-Latitude-E6430:~$ sudo ./mycp.sh file1.txt file2.txt
mariam@mariam-Latitude-E6430:~$ vi file2.txt
```

```
#/bin/bash
if [ $# -eq 2 ]
then
cp $1 $2
fi
```

```
mariam@mariam-Latitude-E6430:~$ vi mycp.sh
mariam@mariam-Latitude-E6430:~$ sudo ./mycp.sh file1.txt file2.txt
mariam@mariam-Latitude-E6430:~$ ls /mydir
ls: cannot access '/mydir': No such file or directory
mariam@mariam-Latitude-E6430:~$ ls ./mydir
file1.txt file2.txt

#/bin/bash
cp $* ./mydir
```

- 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.

```
mariam@mariam-Latitude-E6430:~/mydir$ cd ..
mariam@mariam-Latitude-E6430:~$ source mycd.sh mydir/
mariam@mariam-Latitude-E6430:~/mydir$

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

- 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.

```
mariam@mariam-Latitude-E6430:~$ vi mycd.sh
mariam@mariam-Latitude-E6430:~$ source mycd.sh mydir
file1.txt file2.txt

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

- 6. Enhance the above script to support the following options individually:
 - a. -I: 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
if [ $# -eq 0 ]
then
    ls
fi
if [ $1 = "-l" ]
then
    ls $1
fi
if [ $1 = "-a" ]
then
    ls $1
fi
if [ $1 = "-d" ]
then
    ls $1
fi
if [ $1 = "-i" ]
then
   ls $1
fi
if [ $1 = "-R" ]
then
    ls $1
fi
```

```
mariam@mariam-Latitude-E6430:~$ vi mycd.sh
mariam@mariam-Latitude-E6430:~$ source ./mycd.sh -d
mariam@mariam-Latitude-E6430:~$ source ./mycd.sh
          file1
                     greeting.sh mycp.sh Pictures
                                                     s2.sh
Oocuments file1.txt Music
Oownloads file2.txt mycd.sh
                                  passwd
                                           s1.sh
bash: [: =: unary operator expected
mariam@mariam-Latitude-E6430:~$
```

- 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)

```
#!/bin/bash
if [ -f $1 ]
then
        echo "It's a file"
elif [ -d $1 ]
then
        echo "It's a dir"
else
        echo "PLease enter valid argumetn"
fi
if [ -r $1 ]
then
        echo "Readable"
fi
if [ -w $1 ]
then
        echo "Writable"
fi
if [ -x $1 ]
then
        echo "Excutable"
fi
```

```
mariam@mariam-Latitude-E6430:~$ vi mytest.sh
mariam@mariam-Latitude-E6430:~$ chmod +x mytest.sh
mariam@mariam-Latitude-E6430:~$ ./mytest.sh

It's a file
Readable
Writable
Excutable
```

- 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.

```
#!/usr/bin/bash
read -p "Enter Your UserName :" userName
ls -la "/home/$userName"
cp -R /home/3bsmii3 /tmp
ps -u $userName
~
```

```
mariam@mariam-Latitude-E6430:~$ vi myinfo.sh
mariam@mariam-Latitude-E6430:~$ chmod +x myinfo.sh
mariam@mariam-Latitude-E6430:~$ ./myinfo.sh

Enter Your UserName :mariam
total 15984
drwxr-x--- 20 mariam mariam 4096 11:03 31 ...
drwxr-xr-x 4 root root 4096 00:07 31 ...
-rw----- 1 mariam mariam 12373 00:27 31 ...
bash_history
-rw-r---- 1 mariam mariam 220 18:14 20 ...
```