

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

```
# ! /bin/bash
echo "Enter your Name: "
read name
echo "Hello , $name"
```

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.

```
# ! /bin/bash
X=5
export x
source s2.sh
./s2.sh $x
```

```
# ! /bin/bash
echo "The value of x is $x"
```

3- Create a script called mycp where:

- a. It copies a file to another
- b. It copies multiple files to a directory.

```
# ! /bin/bash
Echo "Enter file/directory of files"
read target

if [-f $target ]
then
    cp $target file.txt
else
    cp $target/*.txt dir2/
fi
```

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
```

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
echo "Enter Option with ls: "
read opt
if [ $# -eq 0 ]
then
    ls $opt
else
    ls $1 $opt
fi
```

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
echo "Enter Option with ls:"
read opt

if [ $# -eq 0 ]
then
    ls $opt
else
    ls $1 $opt
fi
```

Bonus: enhance the above script to support the following Synopsis:

`mys -option1 -option2`

`mys -option2 -option1`

`mys -option1option2`

`mys -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)

```
#!/bin/bash
if [ -f $1 ]
then
    echo "File"
fi

if [ -d $1 ]
then
    echo "Dir"
fi

if [ -r $1 ]
then
    echo "Readable"
fi

if [ -w $1 ]
then
    echo "Writable"
fi

if [ -x $1 ]
then
    echo "Executable"
fi
```

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.

```
#!/bin/bash
echo "Enter your logname: "
read logname

echo "Files and dirs in home directory"
ls -l ~

echo "copying files and directories to temp dir"
mkdir tmp
cp -r ~/* /tmp

echo "Current process status: "
ps aux | grep $logname
```