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

```
#!/usr/bin/bash
read -p "enter your user name :" user
echo Hello $user
```

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
<< comment
read -p "enter your user name " user
echo Hello $user
comment
export x=5
s2
```

```
#!/usr/bin/bash
<< comment
read -p "enter your user name " user
echo Hello $user
comment
x=5
source s2
```

```
x=5
s2 $x
```

-note: x as argument for s2

3. Create a script called mycp where:

a. It copies a file to another

b. It copies multiple files to a directory.

```
#!/usr/bin/bash
if [ $# -le 1 ]
then
echo "must enter more than 1 arguments"
else
        if [ -f $1 ]
        then
        if [ -e $2 ]
        then
        cp $1 $2
        else
        touch $2
        cp $1 $2
        fi
        else
        echo "enter an exist source file"
        fi
fi
```

```
#!/usr/bin/bash

if [ $# -le 1 ]
then
echo "must enter more than 1 arguments"
elif [ -d $$# ]
then
cp $*
elif [ $# -eq 2 ]
then
          if [ -f $1 ]
          then
          if [ -e $2 ]
          then
          cp $*
          else
          touch $
          cp $1 $2
          fi
          else
          echo "enter an exist source file"
          fi

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.

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

```
alias mycd.sh=". mycd.sh"
# Uncomment the following li
```

note : make alias in .bashrc

```
[Eng.mahmoud@localhost Downloads]$ mycd.sh
[Eng.mahmoud@localhost ~]$ vi .bashrc
[Eng.mahmoud@localhost ~]$ mycd.sh Downloads/
[Eng.mahmoud@localhost Downloads]$ mycd.sh
```

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.

```
#!/usr/bin/bash
if [ $# -eq 0 ]
then
ls --color
else
ls --color $*
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

```
#!/usr/bin/bash
if [ $# -eq 0 ]
then
ls --color
elif [ $1 = -l ]
then
echo "list in long format"
ls --color $3
elif [ $1 = -a ]
then
echo "list all entries including the hiding files."
ls --color $3
elif [ $1 = -d ]
then
echo "if an argument is a directory, list only its name"
ls --color $3
elif [ $1 = -i ]
then
echo "print inode number"
ls --color $3
elif [ $1 = -R ]
then
echo "recursively list subdirectories"
ls --color $3
else
ls --color $2
fi
```

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)

```
#!/usr/bin/bash
if [ -d $1  ]
then
echo it is directory

elif [ -f $1 ]
then
echo it is file

else
echo it is nothing
x=1
fi
if [ x != 1 ]
then
if [ -r $1 ]
then
echo it is readable
fi
if [ -w $1 ]
then
echo it is writable
fi
if [ -x $1 ]
then
echo it is executable
fi
fi
```

```
[Eng.mahmoud@localhost ~]$ mytest Downloads/
it is directory
it is readable
it is writable
it is executable
```

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 you logname :" log
if [ -e /home/$log ]
then
cp -R /home/$log /tmp 2>/dev/null
ps
ls --color /home/$log
else
echo this logname not exist
fi
~
```

```
[Eng.mahmoud@localhost ~]$ myinfo
enter you logname :Eng.mahmoud
    PID TTY          TIME CMD
  13518 pts/0    00:00:00 bash
  19650 pts/0    00:00:00 myinfo
  19652 pts/0    00:00:00 ps
all_files  dir1  dir3  dir55  Documents  error   file_result  Music   new.bash   Pictures  Templates
Desktop    dir2  dir4  docs   Downloads  error2  lab2         myteam  oldpasswd  Public    Videos
```