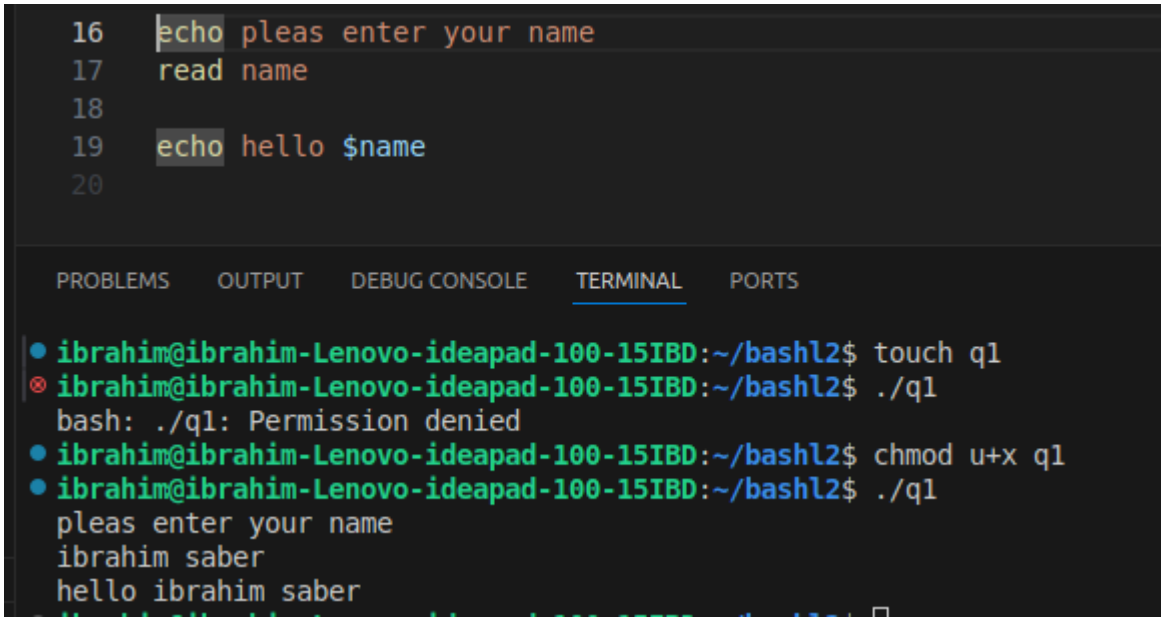
BASH lab 2

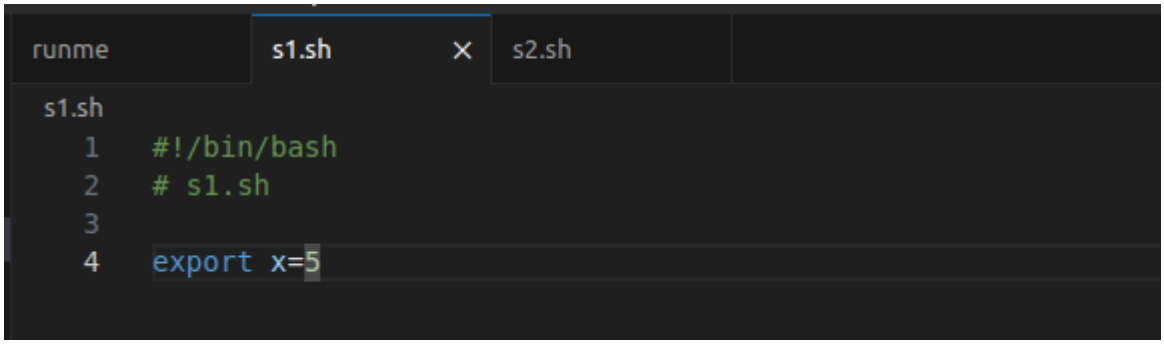
1. Create a script that asks for user name then send a greeting to him.



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.



```
11
12  # 1st way using sourse & echo:)
13  source ./s1.sh
14
15  echo "using echo Value of x is: $x"
16
17  # 2nd way using sourse & printf:)
18
19  printf "using printf The value of x is: %s\n" "$x"
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ ./s2.sh
using echo Value of x is: 5
using printf The value of x is: 5
```

3. Create a script called mycp where:

a. It copies a file to another

b. It copies multiple files to a directory.

mycp

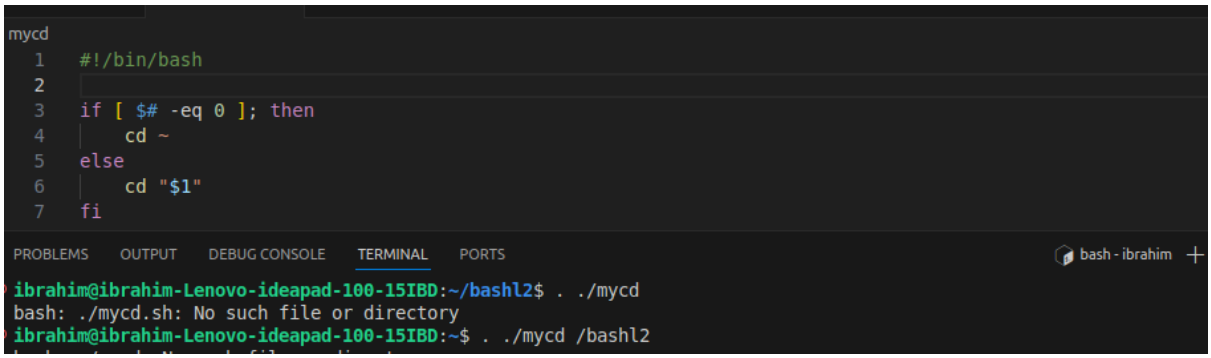
```
1   #!/bin/bash
2   if [ $# -eq 2 ]; then
3       cp "$1" "$2"
4   elif [ $# -gt 2 ]; then
5       target_dir=${!#}
6       for file in "${@:1:$#-1}"; do
7           cp "$file" "$target_dir"
8       done
9   else
10      echo "Usage: $0 source_file target_file OR $0 source_file1 source_file2 ... target_directory"
11  fi
12
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  bash - q3dir

ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ touch mycp
ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ ls
mycp  q1  runme  s1.sh  s2.sh
ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ chmod u+x mycp
ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ touch q3file1 q3file2
ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ nano q3file1
ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ cat q3file1
hi there from q3 file one
ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ cat q3file2
ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ ./mycp q3file1 q3file2
ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ cat q3file2
hi there from q3 file one
ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ mkdir q3dir
ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ ./mycp q3file1 q3file2 q3dir
ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ cd q3dir
ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2/q3dir$ ls
q3file1  q3file2
```

4. Create a script called mycd where:

a. It changed directory to the user home directory, if it is called without arguments.

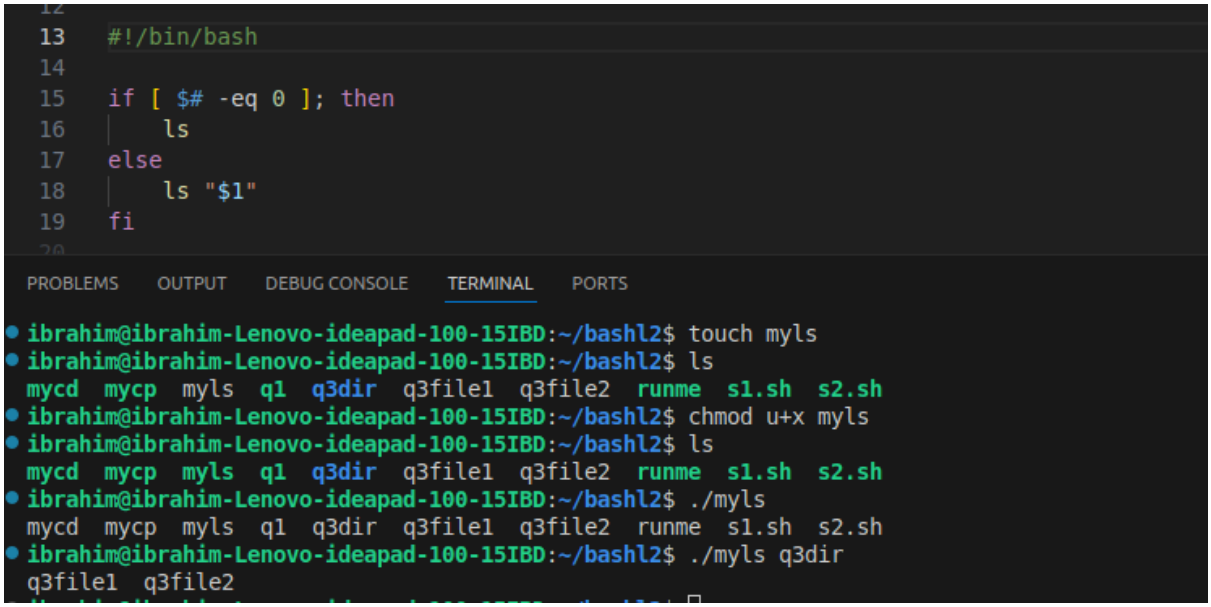
b. Otherwise, it change directory to the given directory.



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.



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

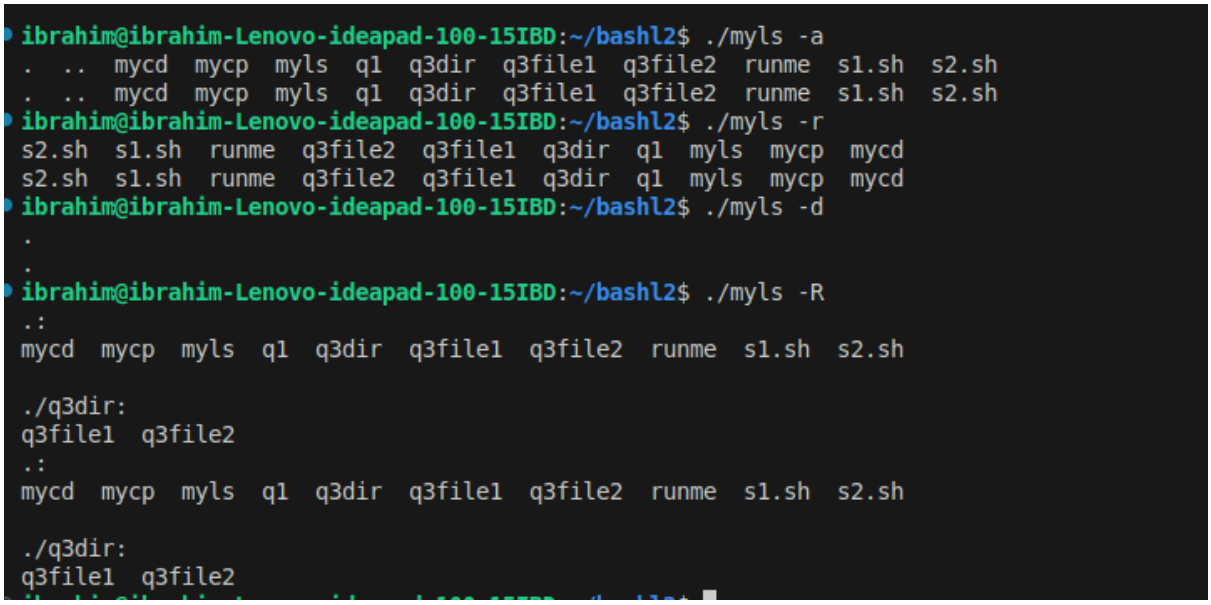
e. –R: recursively list subdirectories

myls

```
#!/bin/bash

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

options=""
directory="."

while [[ "$1" == -* ]]; do
    options+="$1 "
    shift
done

if [ $# -gt 0 ]; then
    directory="$1"
fi

ls $options "$directory"
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
-rwxrwxr-x 1 ibrahim ibrahim   67 لوي 10 22:43 mycd
-rwxrw-r-- 1 ibrahim ibrahim  278 لوي 10 22:10 mycp
-rwxrw-r-- 1 ibrahim ibrahim  220 لوي 10 22:49 myls
-rwxrw-r-- 1 ibrahim ibrahim   68 لوي 10 21:10 q1
drwxrwxr-x 2 ibrahim ibrahim 4096 لوي 10 22:12 q3dir
```


ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ ./myls -a
. .. mycd mycp myls q1 q3dir q3file1 q3file2 runme s1.sh s2.sh
. .. mycd mycp myls q1 q3dir q3file1 q3file2 runme s1.sh s2.sh
ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ ./myls -r
s2.sh s1.sh runme q3file2 q3file1 q3dir q1 myls mycp mycd
s2.sh s1.sh runme q3file2 q3file1 q3dir q1 myls mycp mycd
ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ ./myls -d
.
.
ibrahim@ibrahim-Lenovo-ideapad-100-15IBD:~/bashl2$ ./myls -R
.:
mycd mycp myls q1 q3dir q3file1 q3file2 runme s1.sh s2.sh
./q3dir:
q3file1 q3file2
.:
mycd mycp myls q1 q3dir q3file1 q3file2 runme s1.sh s2.sh
./q3dir:
q3file1 q3file2