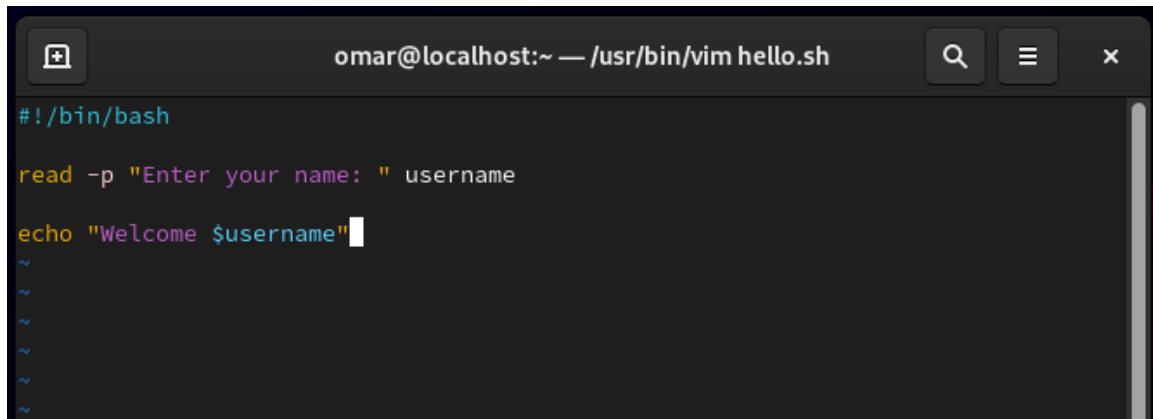


Bash lab 2

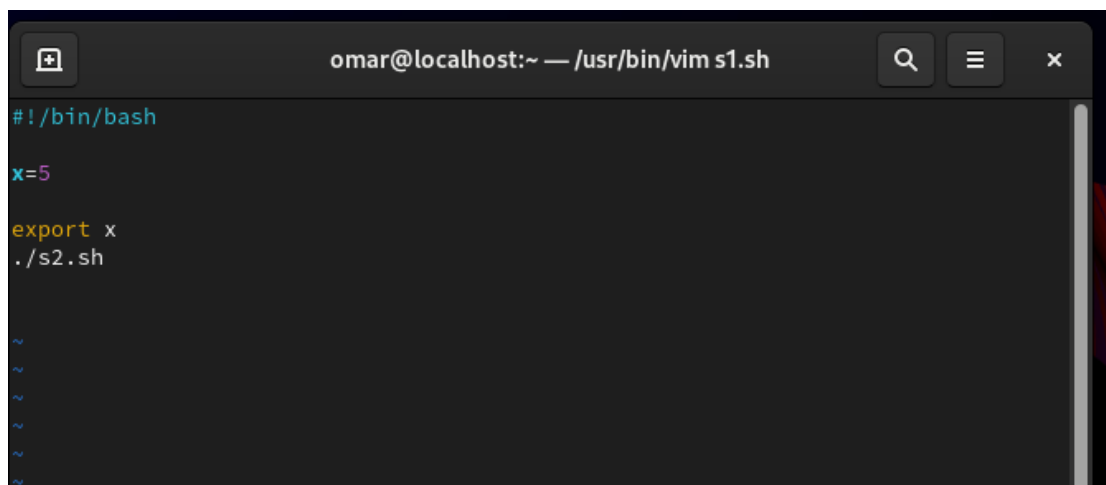
1. Create a script that asks for user name then send a greeting to him.



The screenshot shows a terminal window titled 'omar@localhost:~ — /usr/bin/vim hello.sh'. The content of the file is as follows:

```
#!/bin/bash
read -p "Enter your name: " username
echo "Welcome $username"
```

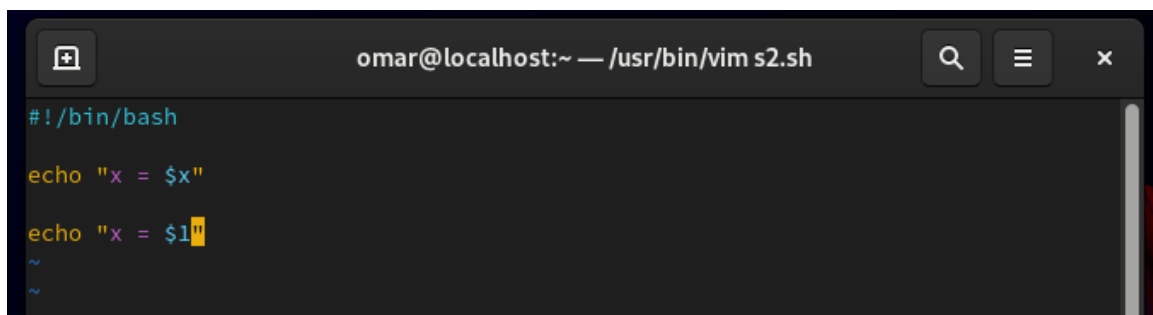
2. Create a script called s1 that calls another script s2 where:
 - a. In s1 there is a variable called x, it's value 5



The screenshot shows a terminal window titled 'omar@localhost:~ — /usr/bin/vim s1.sh'. The content of the file is as follows:

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

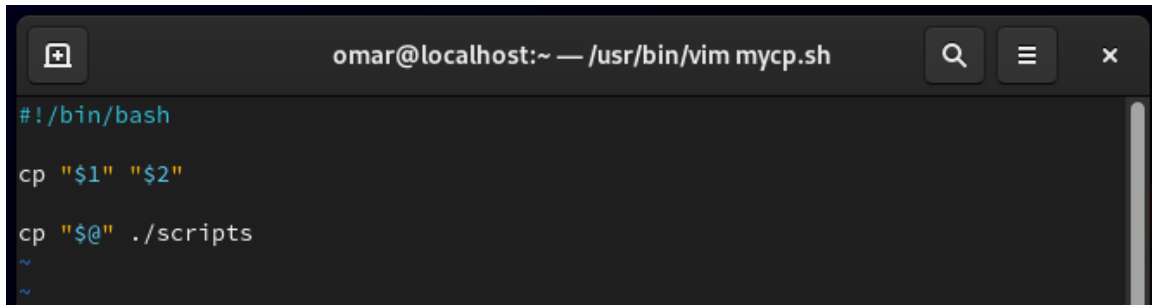
- b. Try to print the value of x in s2 by two different ways.



The screenshot shows a terminal window titled 'omar@localhost:~ — /usr/bin/vim s2.sh'. The content of the file is as follows:

```
#!/bin/bash
echo "x = $x"
echo "x = $1"
```

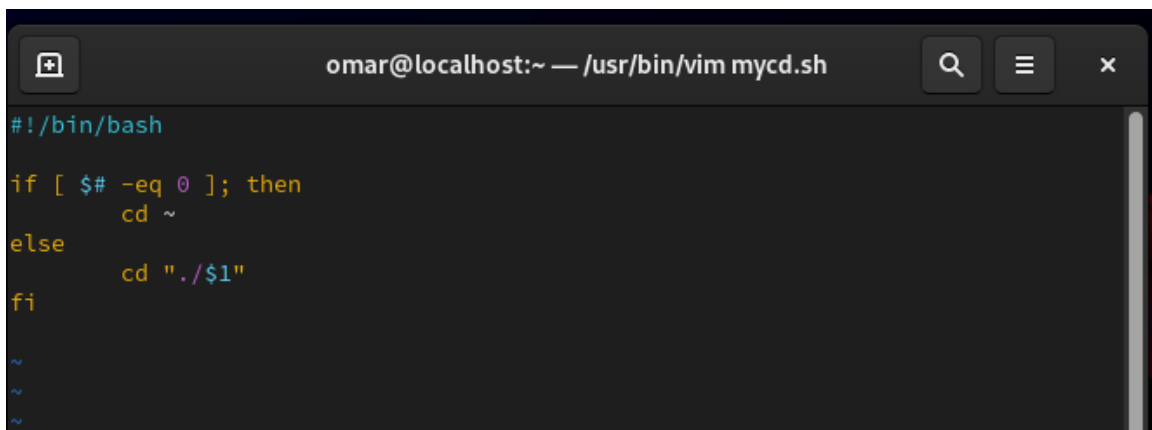
3. Create a script called mycp where:
 - a. It copies a file to another
 - b. It copies multiple files to a directory.



```
omar@localhost:~ — /usr/bin/vim mycp.sh
#!/bin/bash
cp "$1" "$2"
cp "$@" ./scripts
~
~
```

```
[omar@localhost ~]$ ./mycp.sh s1.sh s2.sh
```

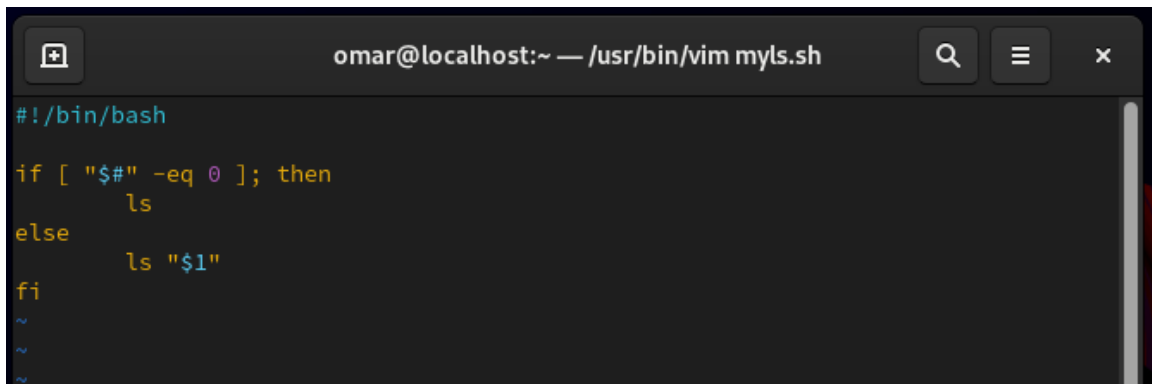
4. Create a script called mycd where:
 - a. It changed directory to the user home directory, if it is called without arguments.
 - b. Otherwise, it change directory to the given directory.



```
omar@localhost:~ — /usr/bin/vim mycd.sh
#!/bin/bash
if [ $# -eq 0 ]; then
    cd ~
else
    cd "$1"
fi
~
~
~
```

```
[omar@localhost scripts]$ . mycd.sh
[omar@localhost ~]$ vi myls.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.



A terminal window titled 'omar@localhost:~ — /usr/bin/vim myls.sh'. The script content is as follows:

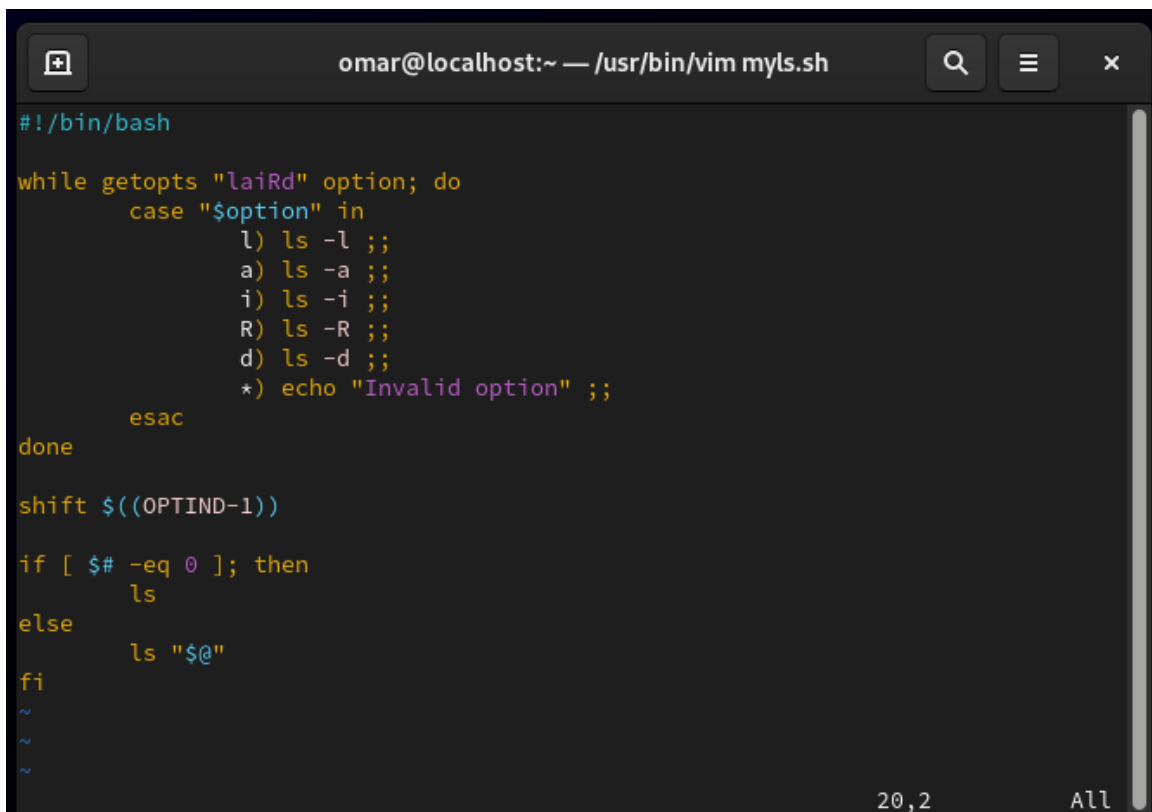
```
#!/bin/bash

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



A terminal window titled 'omar@localhost:~ — /usr/bin/vim myls.sh'. The script content is as follows:

```
#!/bin/bash

while getopts "laiRd" option; do
    case "$option" in
        l) ls -l ;;
        a) ls -a ;;
        i) ls -i ;;
        R) ls -R ;;
        d) ls -d ;;
        *) echo "Invalid option" ;;
    esac
done

shift $((OPTIND-1))

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

~
~
~
```

At the bottom right of the terminal window, the text '20,2' and 'All' are visible.

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

- o `mysl -option1 -option2`
- o `mysl -option2 -option1`
- o `mysl -option1option2`
- o `mysl -option2option1`

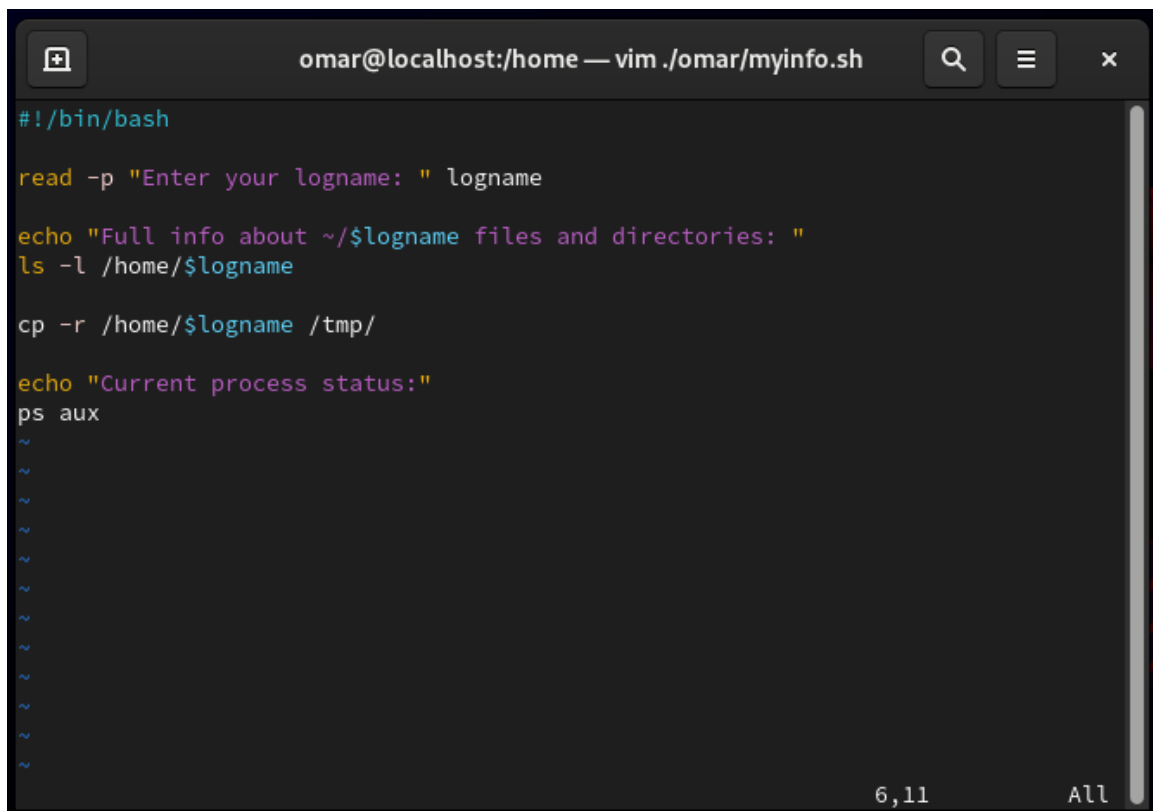
7. Create a script called mytest where:

- It check the type of the given argument (file/directory)
- It check the permissions of the given argument (read/write/execute)

[illegible]

8. Create a script called myinfo where:

- It asks the user about his/her logname.
- It print full info about files and directories in his/her home directory
- Copy his/her files and directories as much as you can in /tmp directory.
- Gets his current processes status.



omar@localhost:/home — vim ./omar/myinfo.sh

```
#!/bin/bash

read -p "Enter your logname: " logname

echo "Full info about ~/$logname files and directories: "
ls -l /home/$logname

cp -r /home/$logname /tmp/

echo "Current process status:"
ps aux

~
~
~
~
~
~
~
~
~
~
~
~
```

6,11 All