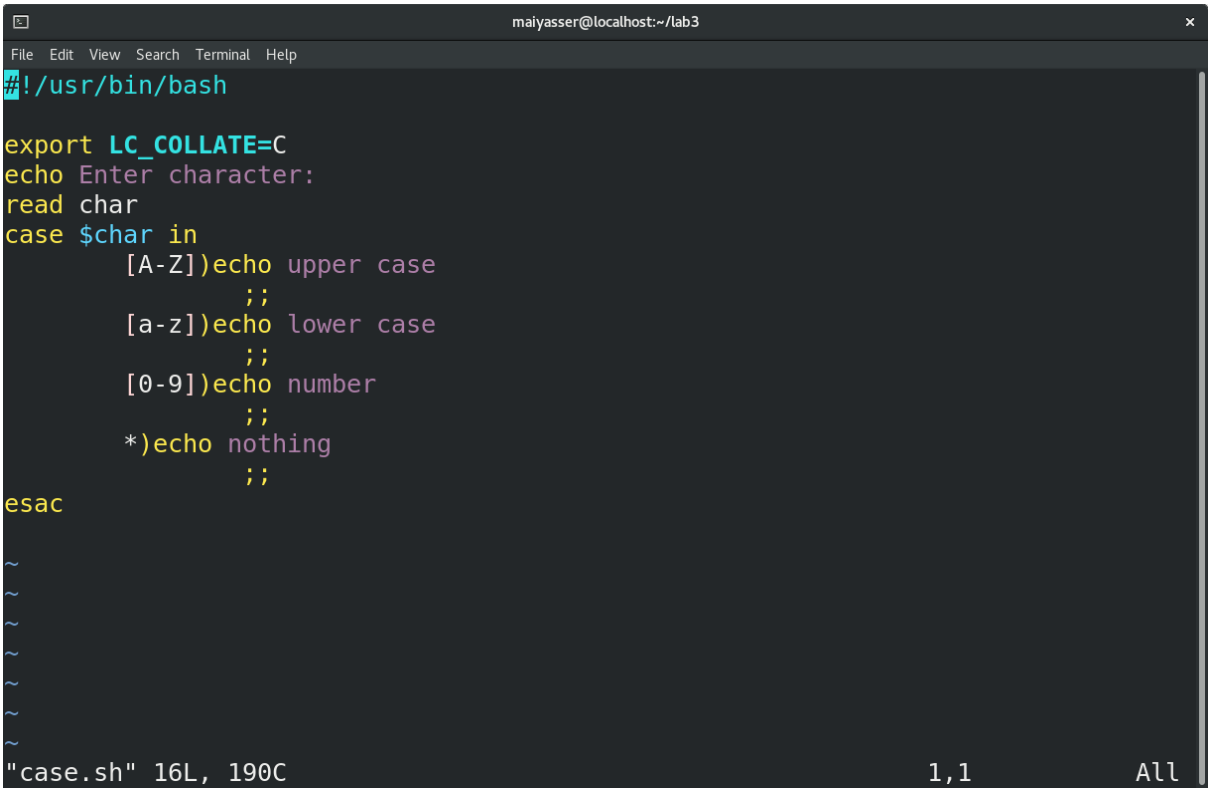
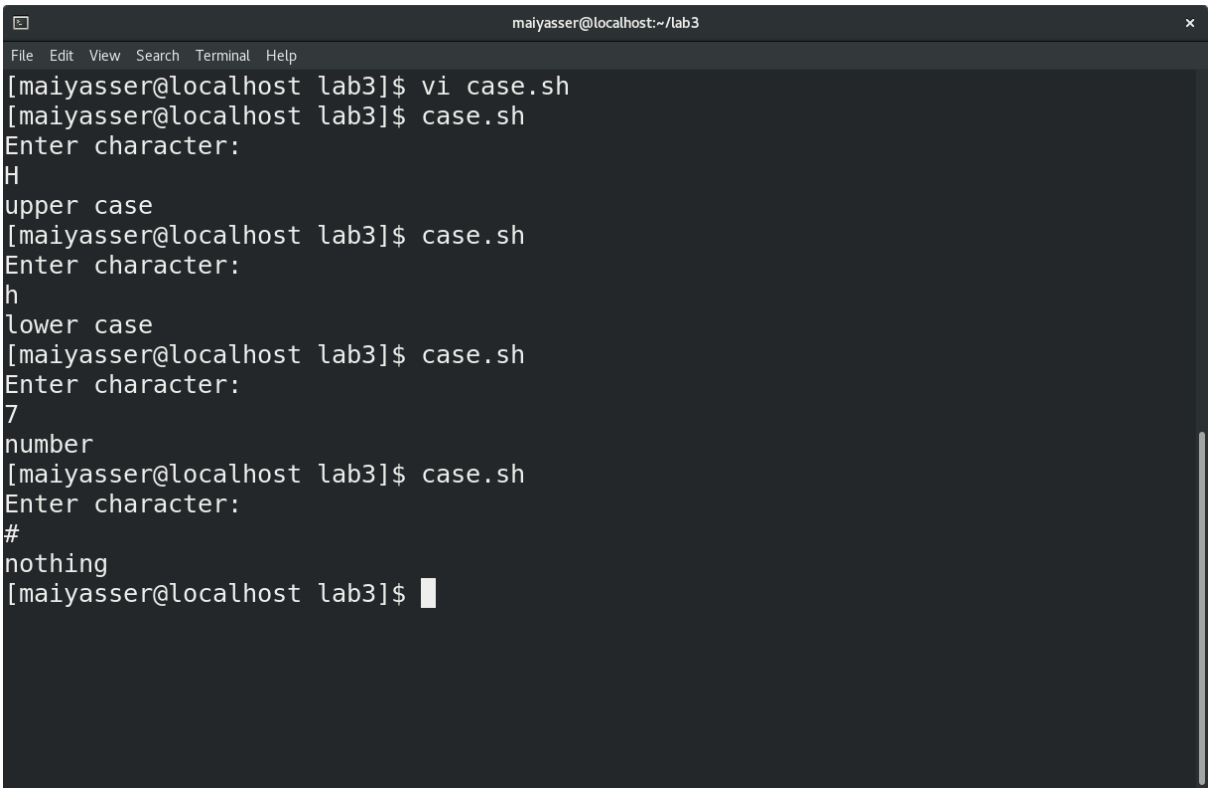
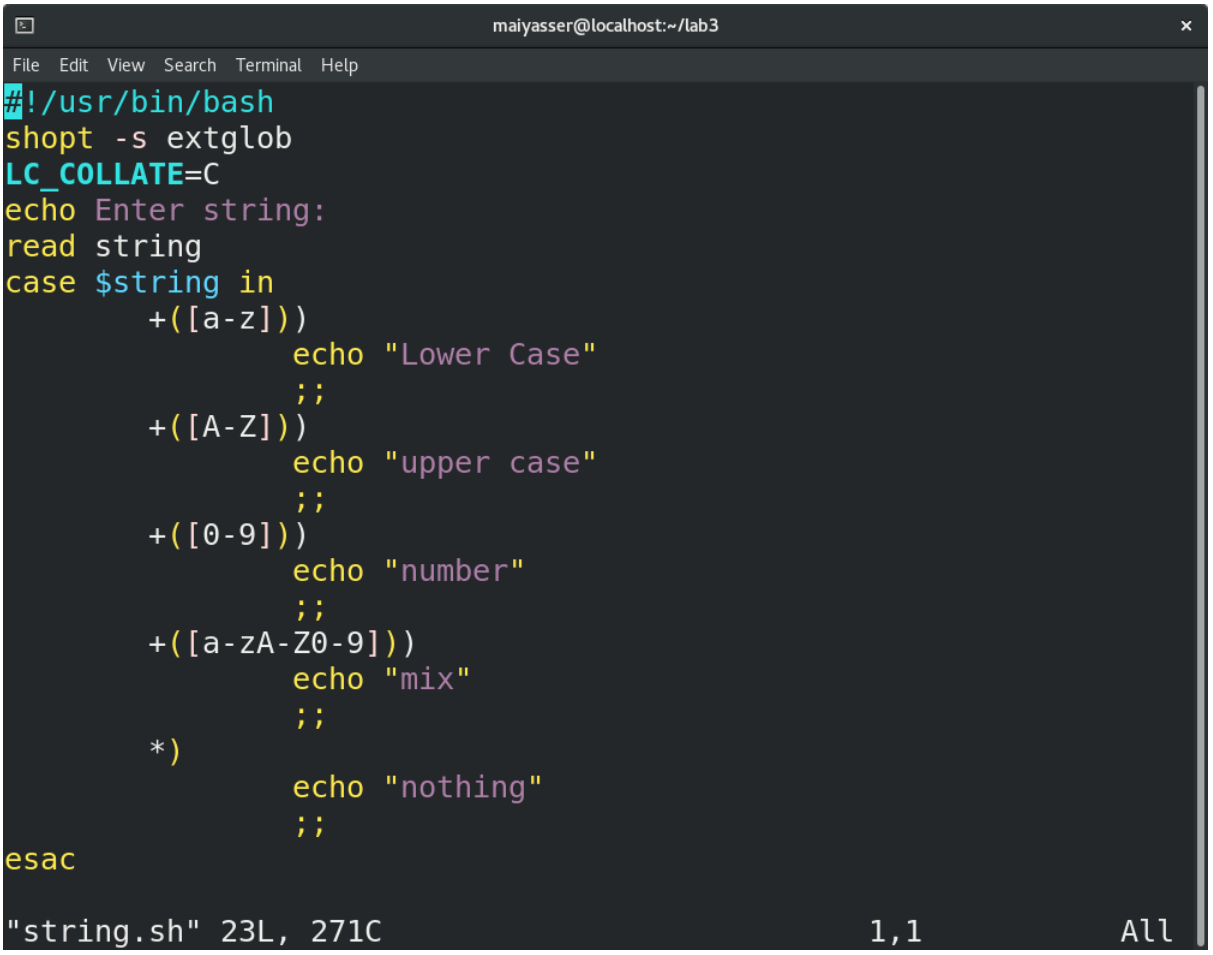
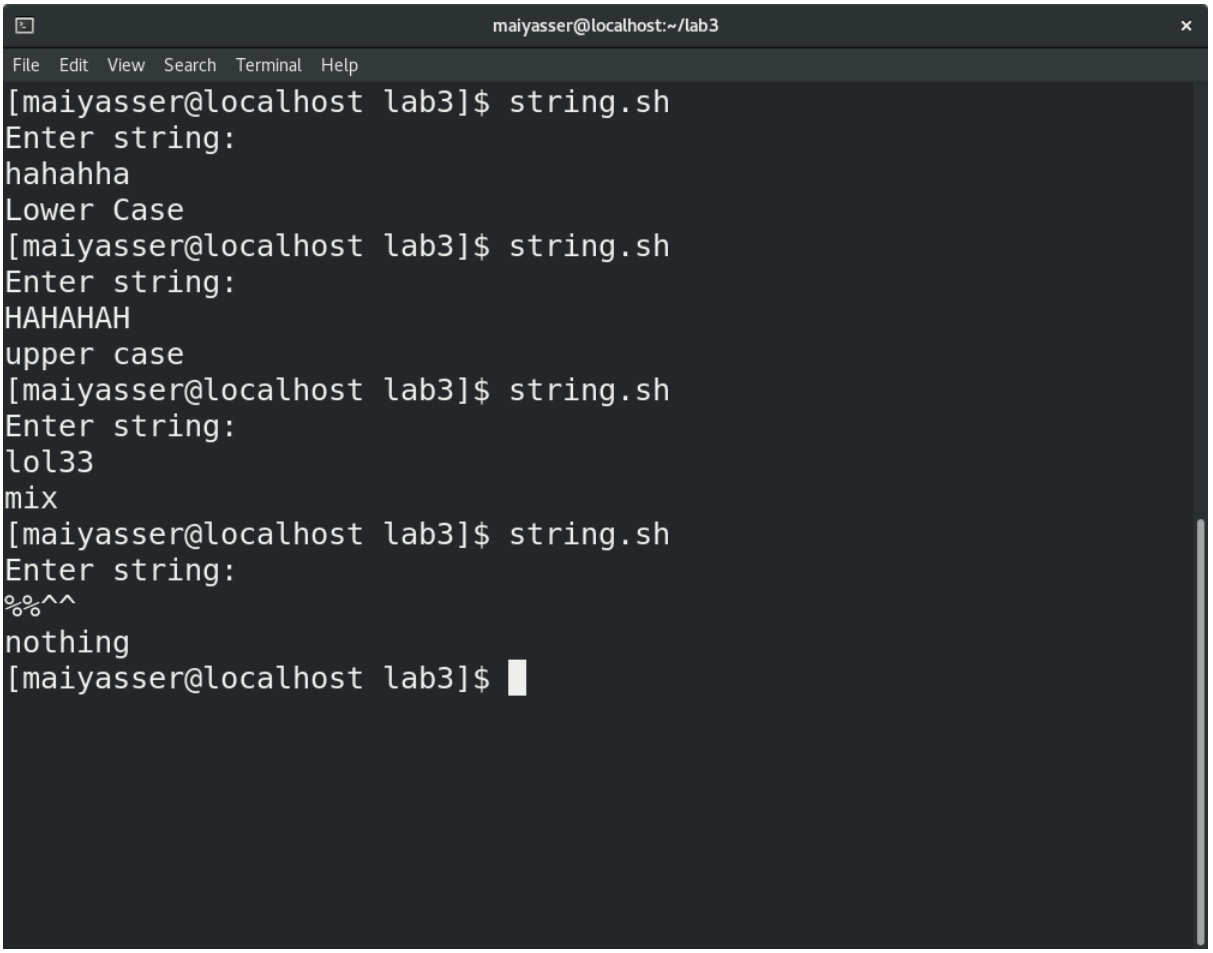
1. Write a script called mycase, using the case utility to checks the type of character entered by a user:
a. Upper Case.
b. Lower Case.
c. Number.
d. Nothing.



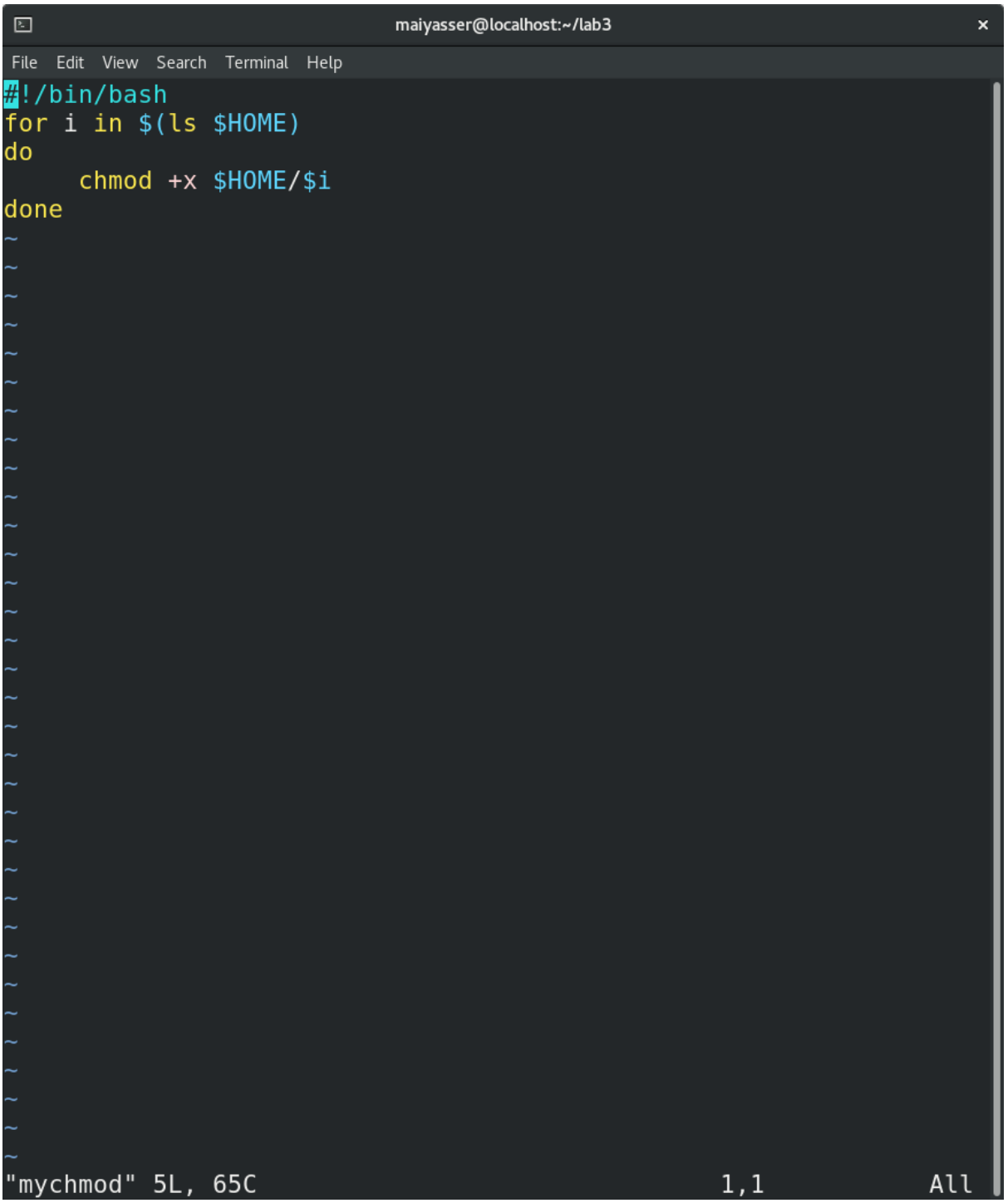


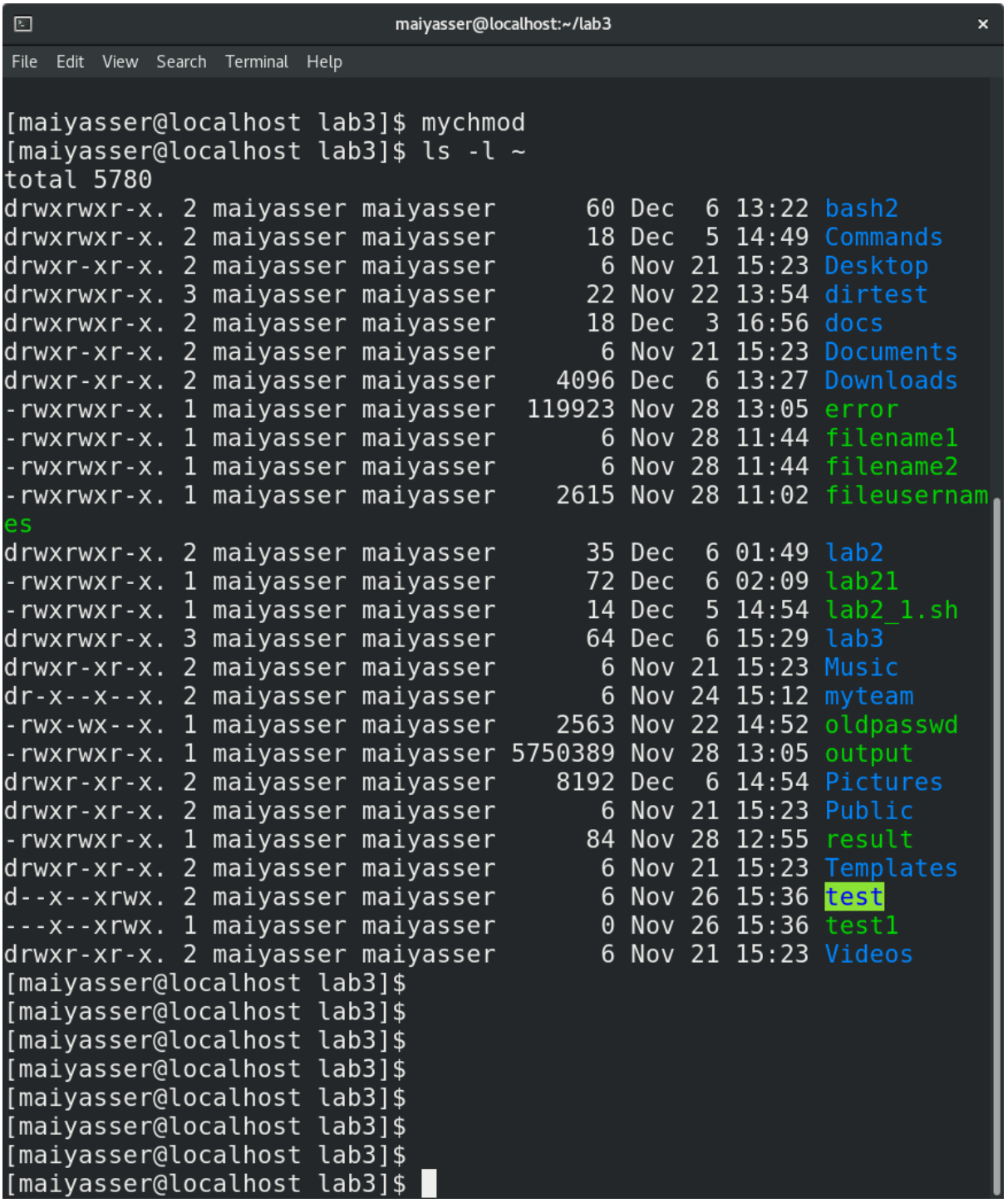
2. Enhanced the previous script, by checking the type of string entered by a user:
a. Upper Cases.
b. Lower Cases.
c. Numbers.
d. Mix.
e. Nothing.




maiyasser@localhost:~/lab3
File Edit View Search Terminal Help
[maiyasser@localhost lab3]$ string.sh
Enter string:
hahahha
Lower Case
[maiyasser@localhost lab3]$ string.sh
Enter string:
HAHAHAH
upper case
[maiyasser@localhost lab3]$ string.sh
Enter string:
lol33
mix
[maiyasser@localhost lab3]$ string.sh
Enter string:
%%^^
nothing
[maiyasser@localhost lab3]$

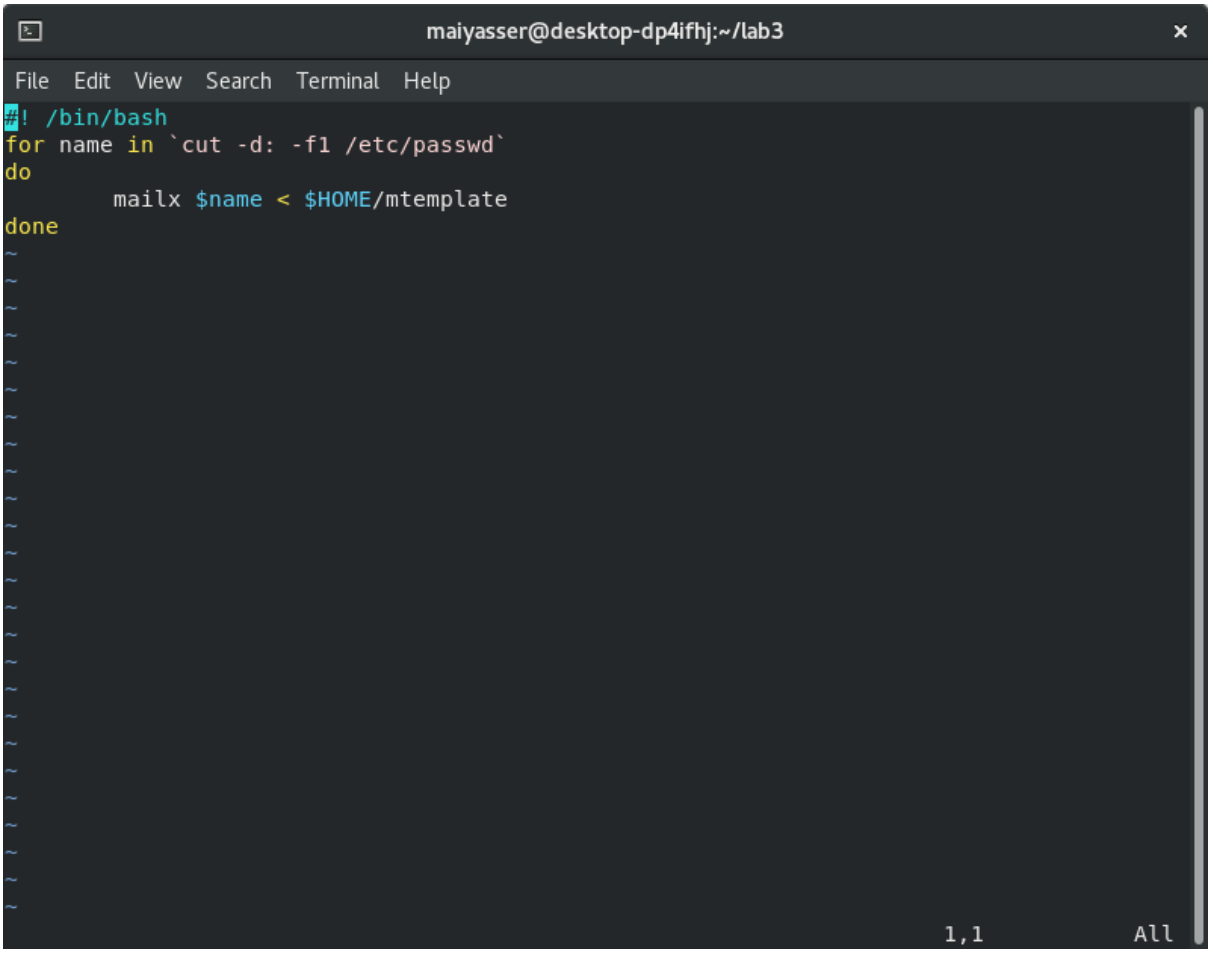
3. Write a script called mychmod using for utility to give execute permission to all files and directories in your home directory.



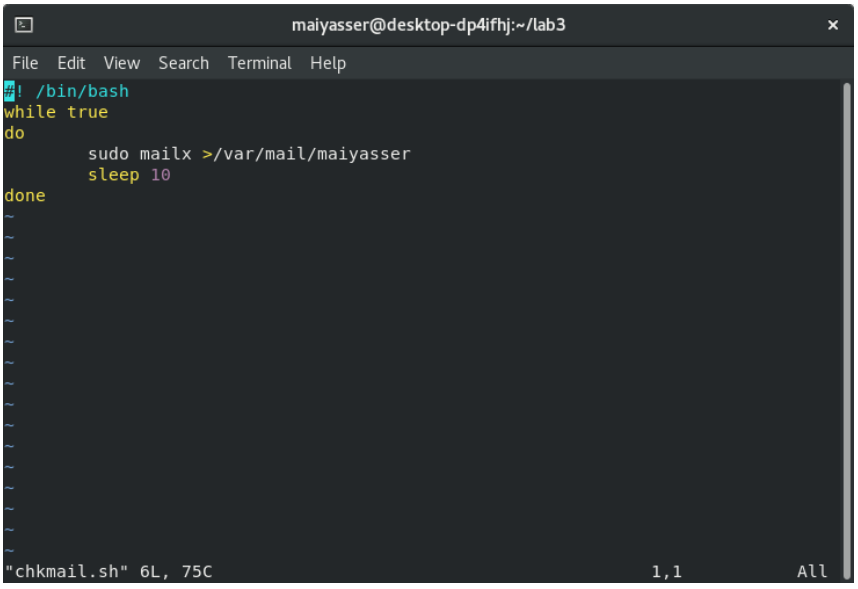


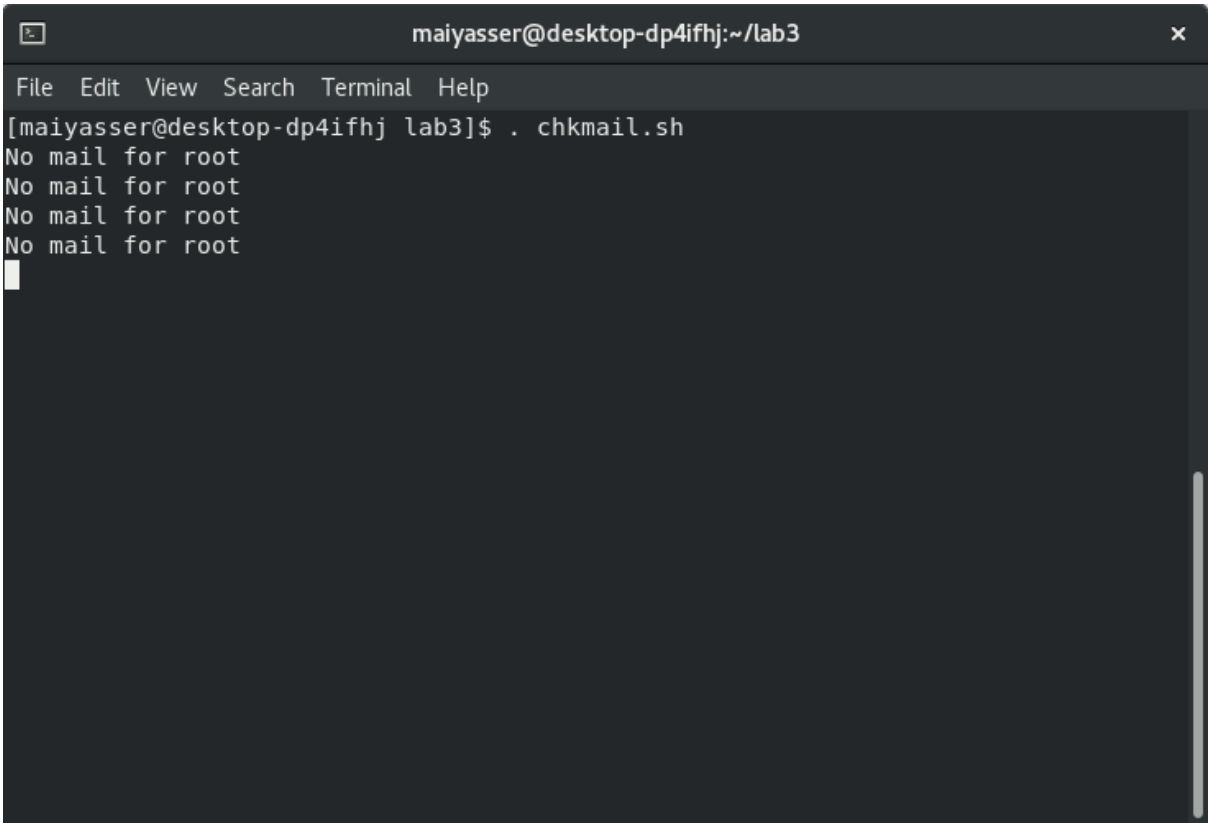
4. Write a script called mybackup using for utility to create a backup of only files in your home directory.

5. Write a script called mymail using for utility to send a mail to all users in the system. Note: write the mail body in a file called mtemplate.



6. Write a script called chkmail to check for new mails every 10 seconds. Note: mails are saved in /var/mail/username.



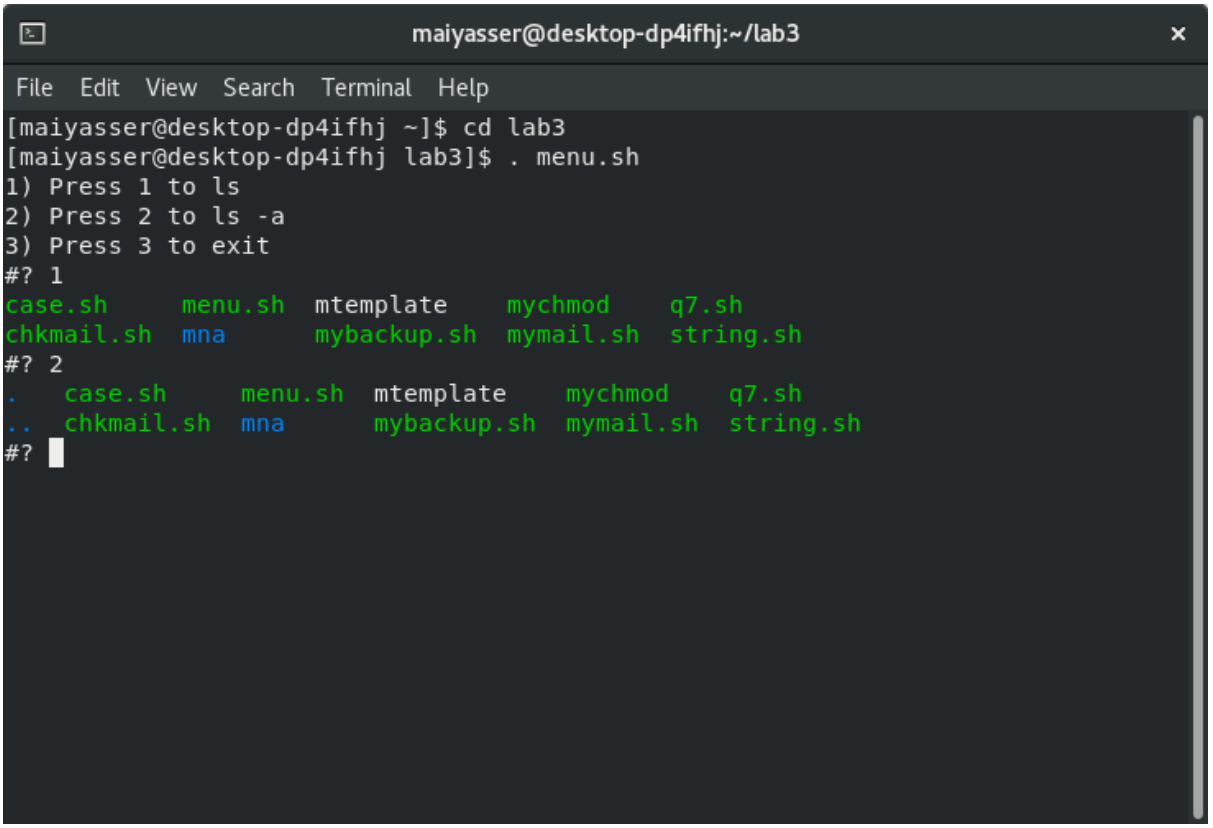


7. What is the output of the following script

```
typeset –i n1
typeset –i n2
n1=1
n2=1
while test $n1 –eq $n2
do
n2=$n2+1
print $n1
if [ $n1 –gt $n2 ]
then
break
else
continue
fi
n1=$n1+1
print $n2
Done
```

Output is 1

8. Create the following menu:
a. Press 1 to ls
b. Press 2 to ls –a
c. Press 3 to exit
Using select utility then while utility.
Using select

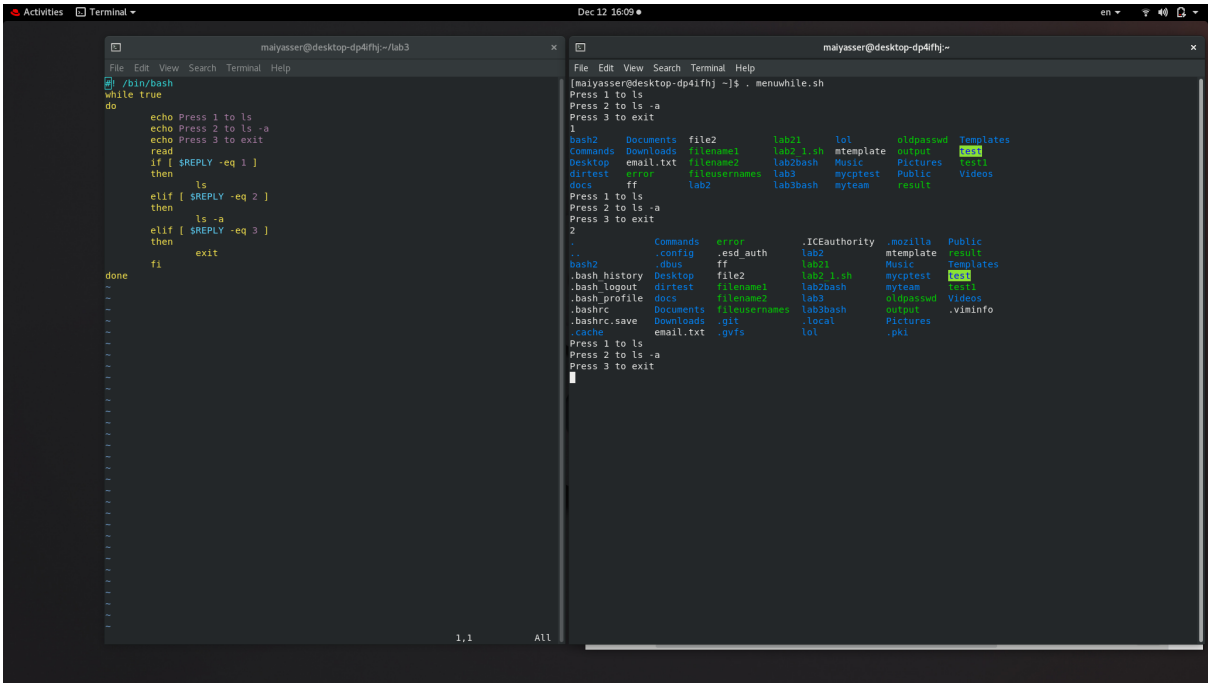


maiyasser@desktop-dp4ifhj:~/lab3

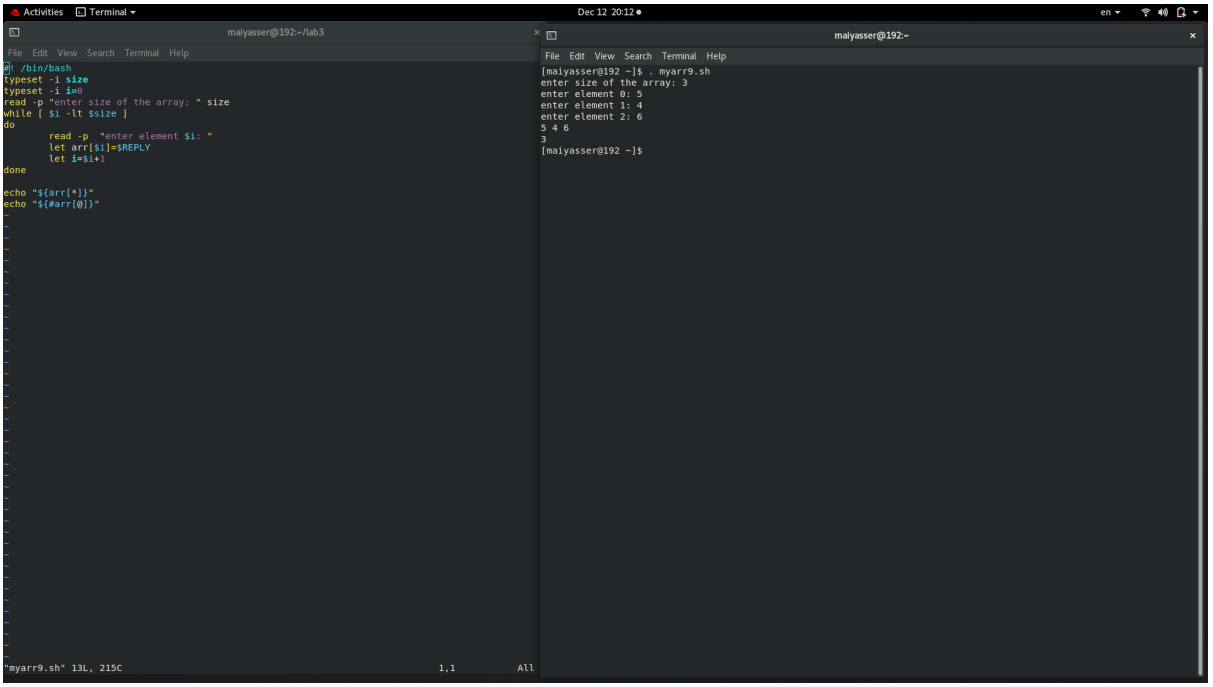
File Edit View Search Terminal Help

```
#! /bin/bash
select choice in "Press 1 to ls" "Press 2 to ls -a" "Press 3 to exit"
do
        case $REPLY in
                1)ls
                        ;;
                2)ls -a
                        ;;
                3)exit
                        ;;
        esac
done
~
~
~
~
~
~
~
~
~
~
~
"menu.sh" 12L, 157C                                           1,1           All
```

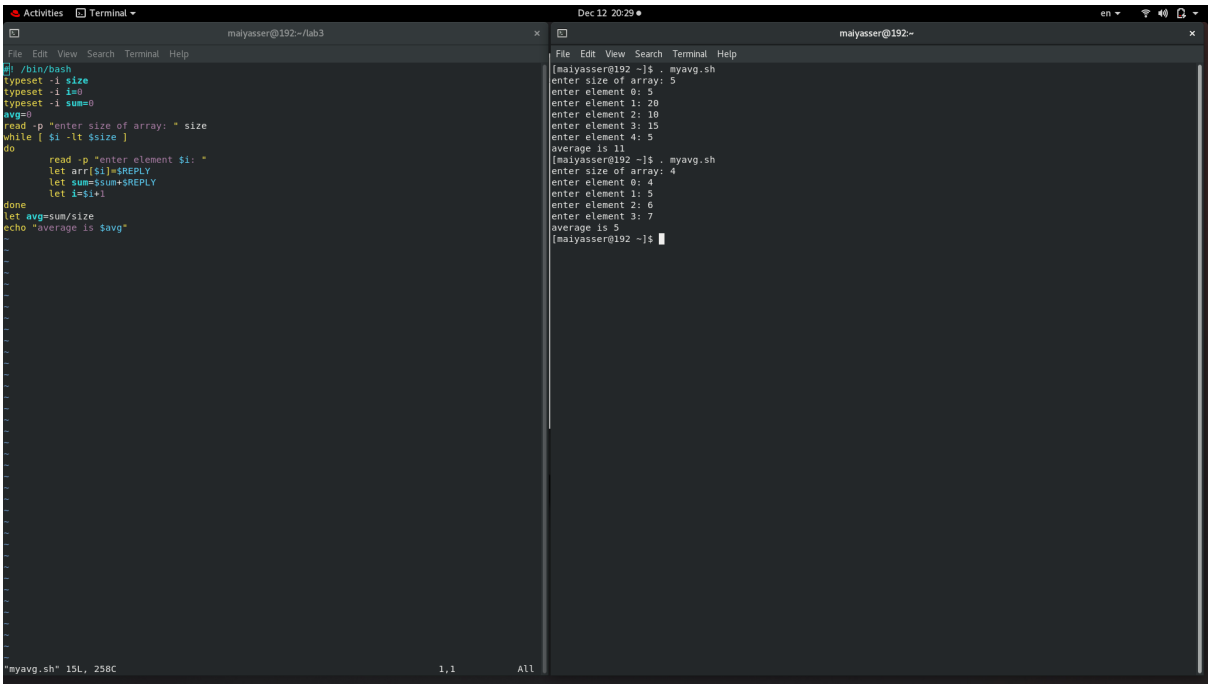
Using while



9. Write a script called myarr that ask a user how many elements he wants to enter in an array, fill the array and then print it.



10.Write a script called myavg that calculates the average of all numbers entered by a user. Note: use arrays



11.Write a function called mysq that calculate square of its argument.