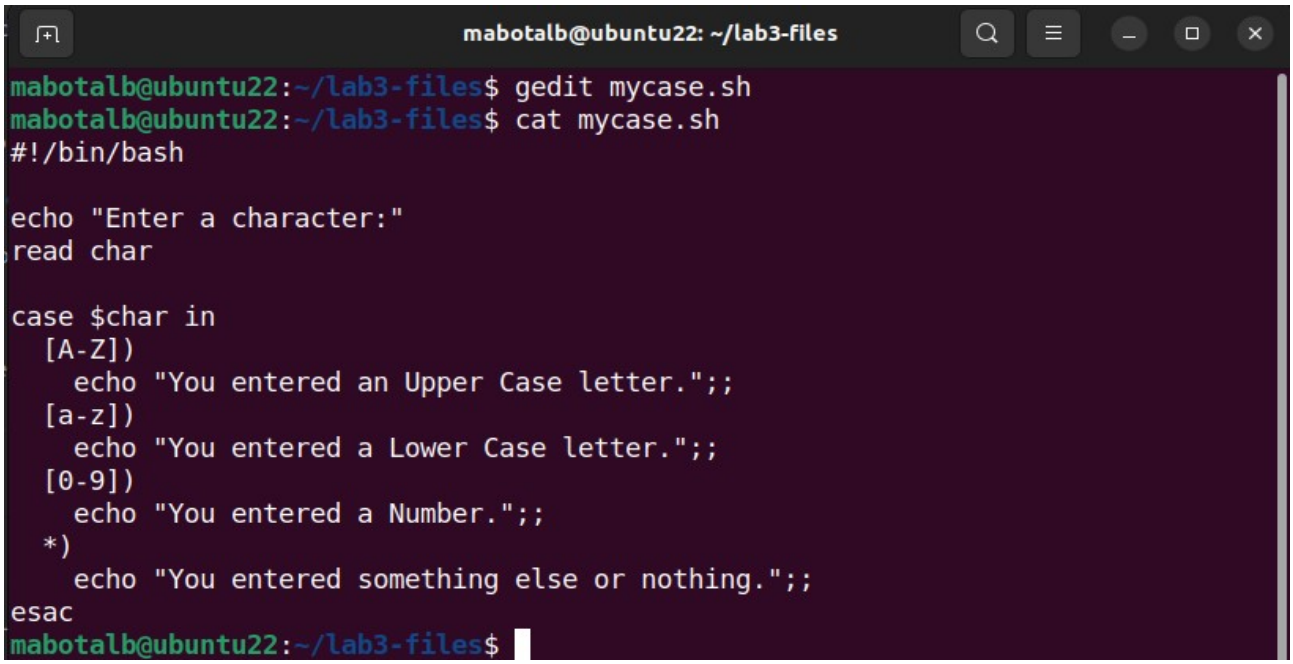
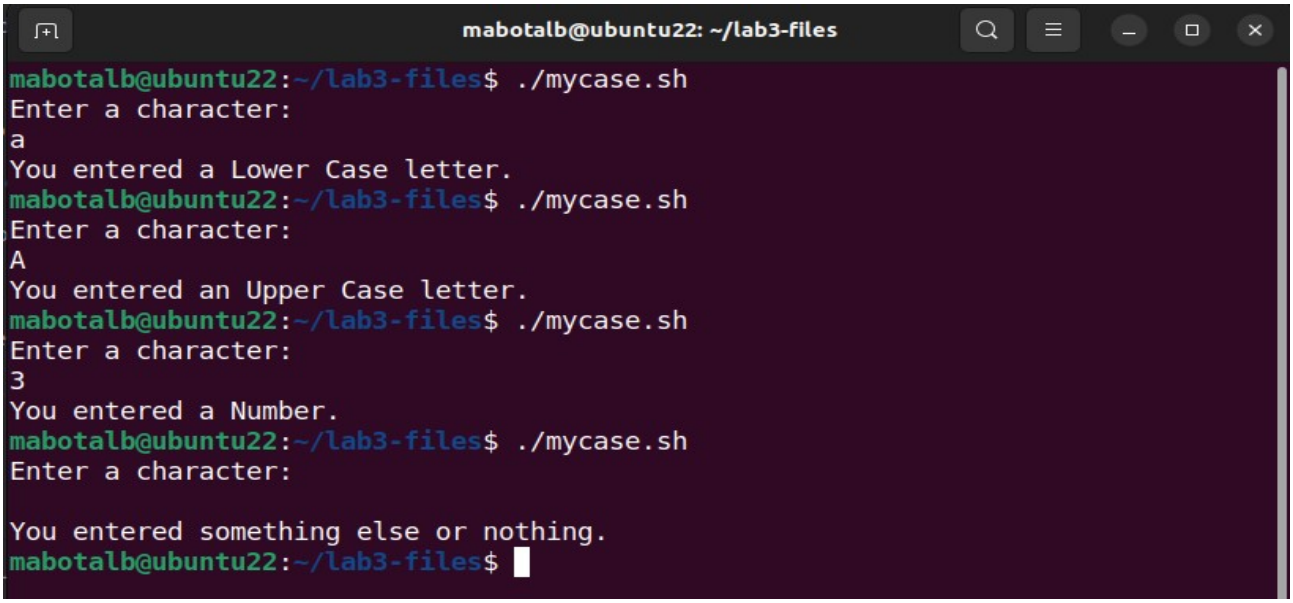
# Shell Script – Day 3

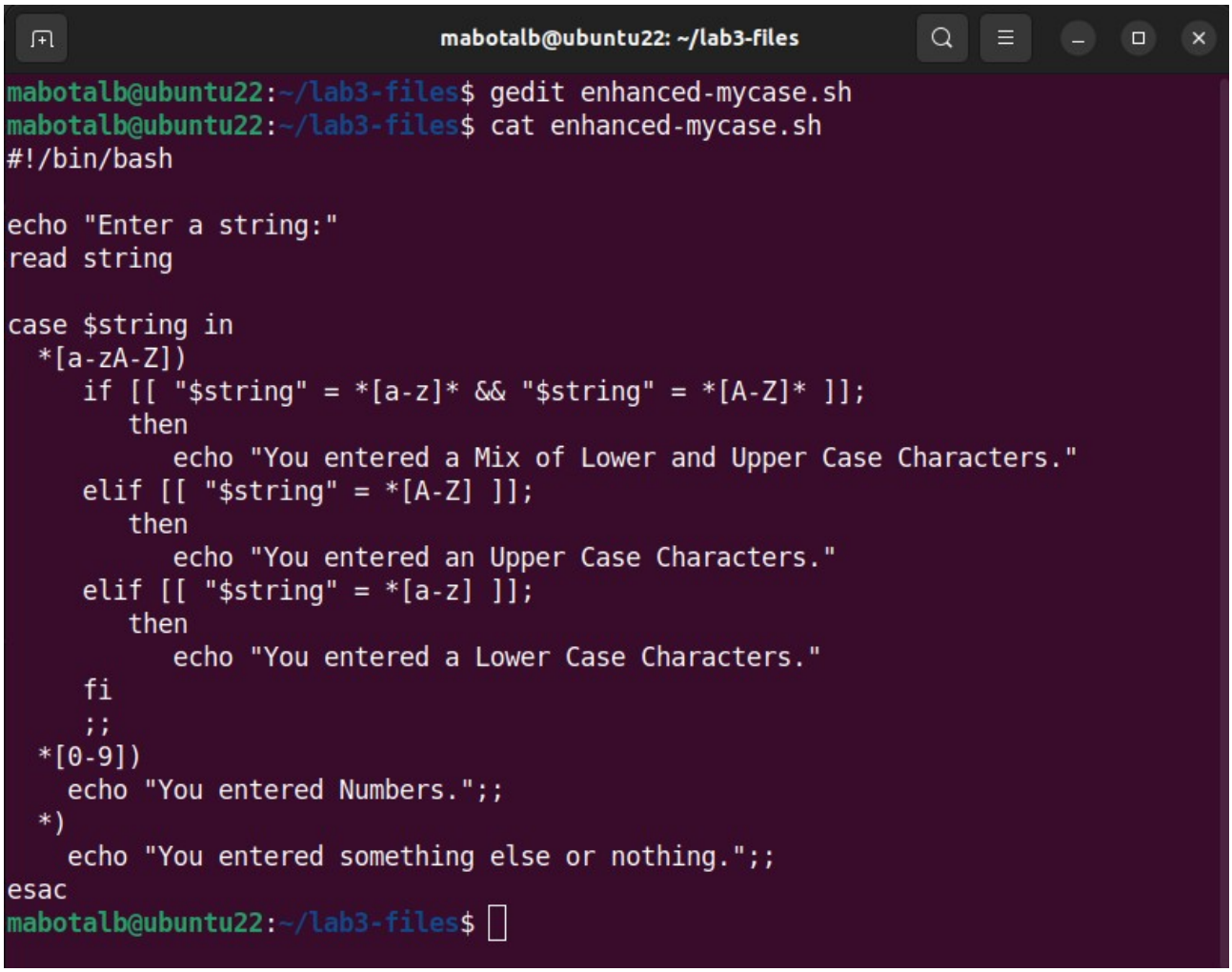
## Mohamed Abd Elaziz Abotalb

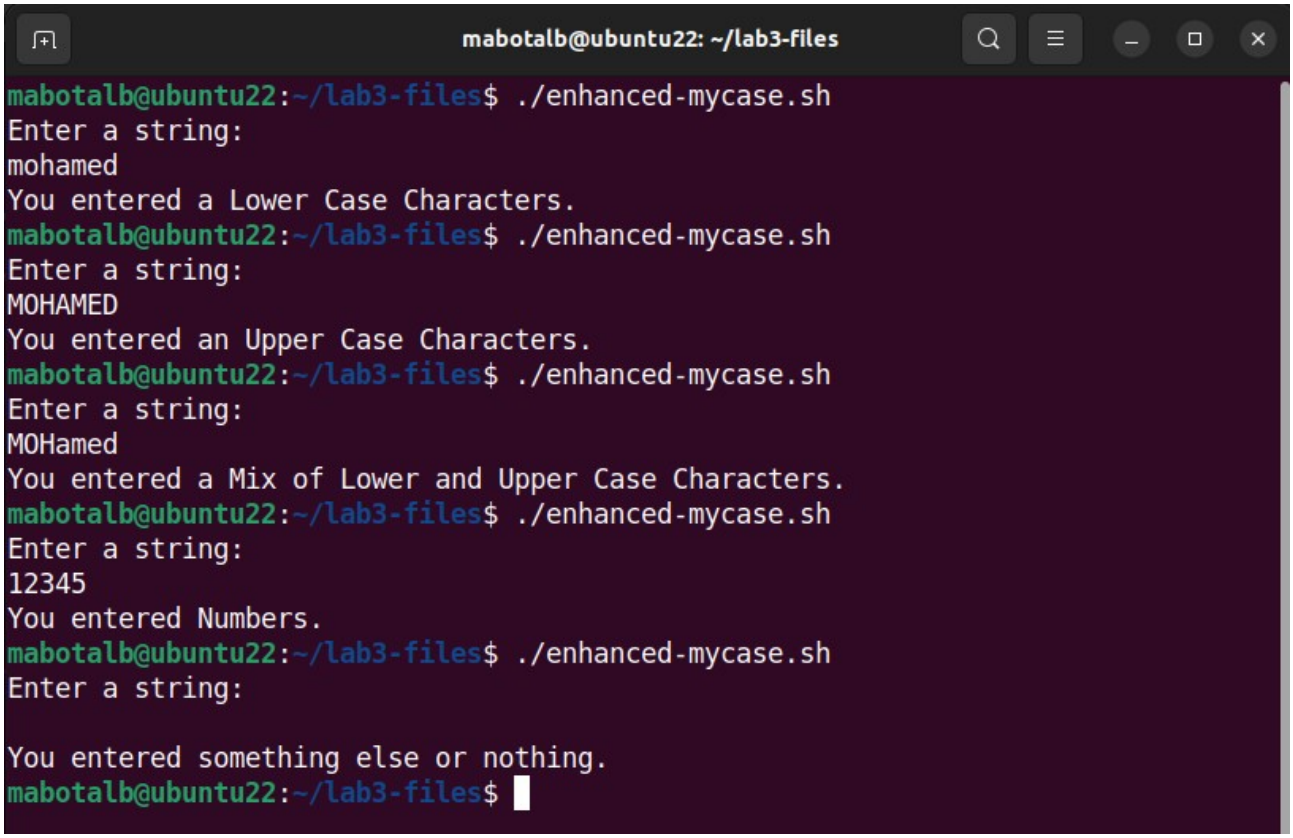
**1. Write a script called mycase, using the case utility to checks the type of character**
**entered by a user:**
**a. Upper Case.**
**b. Lower Case.**
**c. Number.**
**d. Nothing.**



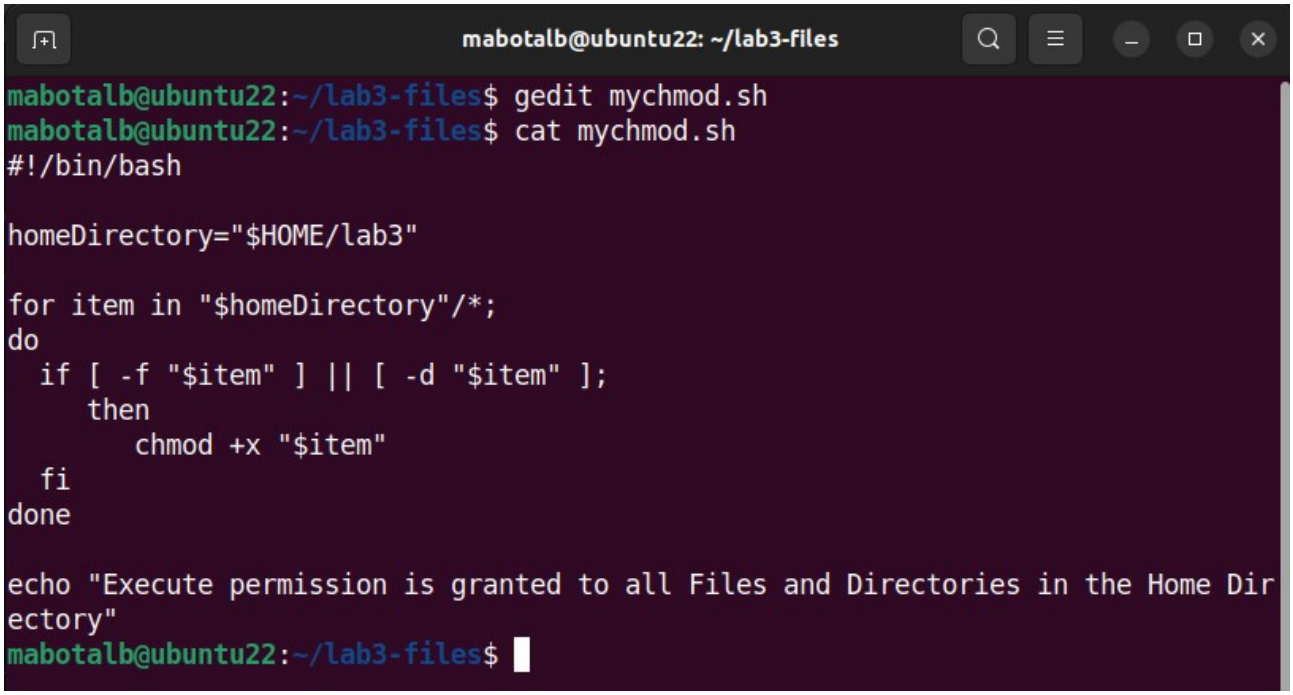



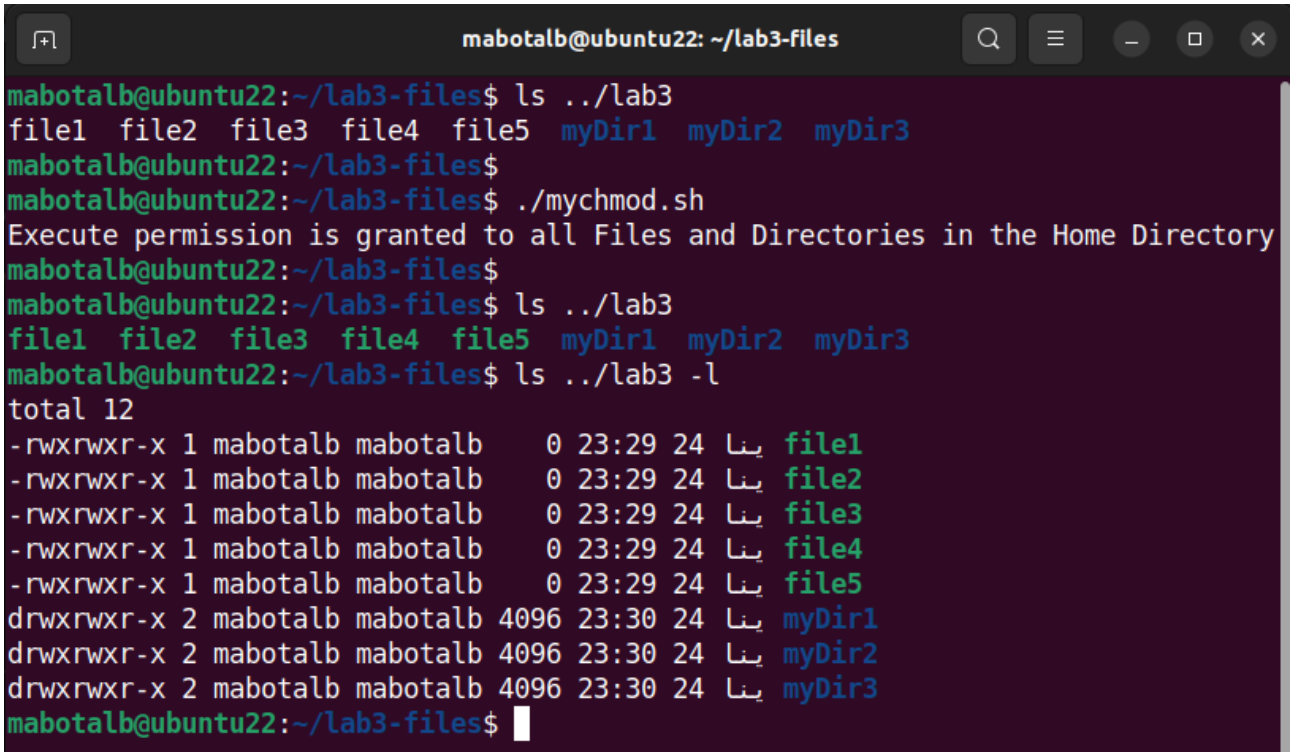
**2. Enhanced the previous script, by checking the type of string entered by a user:**
**a. Upper Cases.**
**b. Lower Cases.**
**c. Numbers.**
**d. Mix.**
**e. Nothing.**



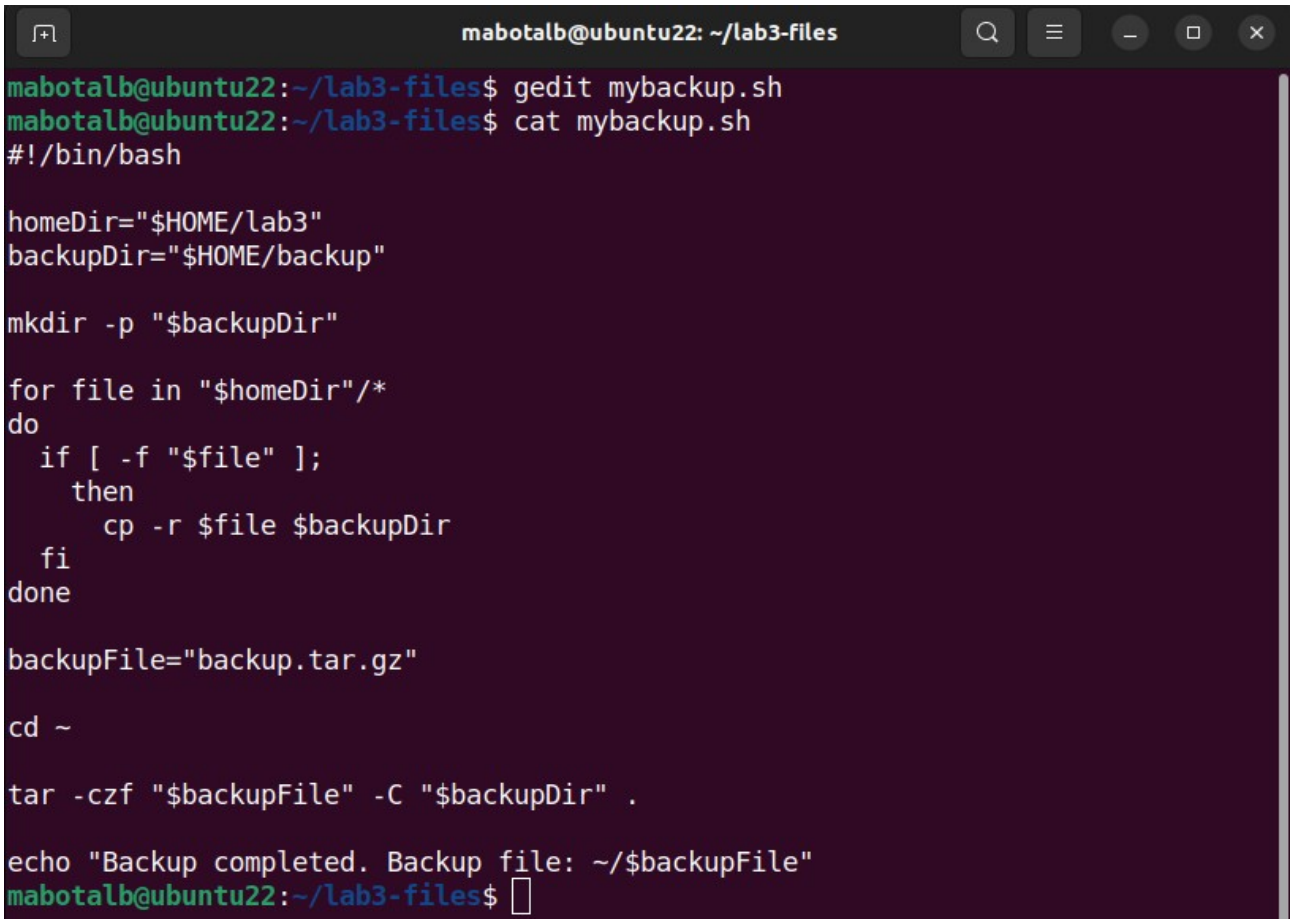


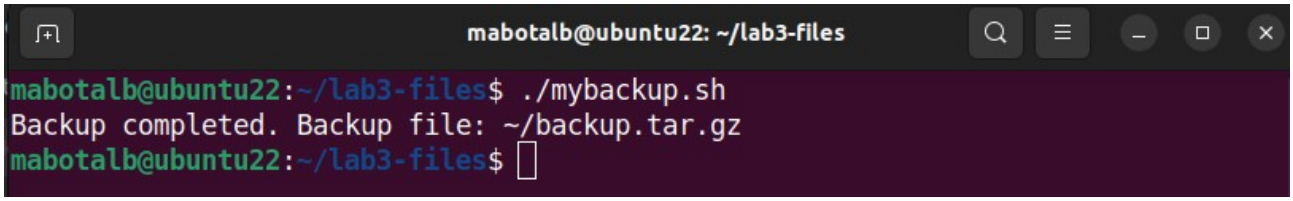

## 3. Write a script called mychmod using for utility to give execute permission to all files and directories in your home directory.



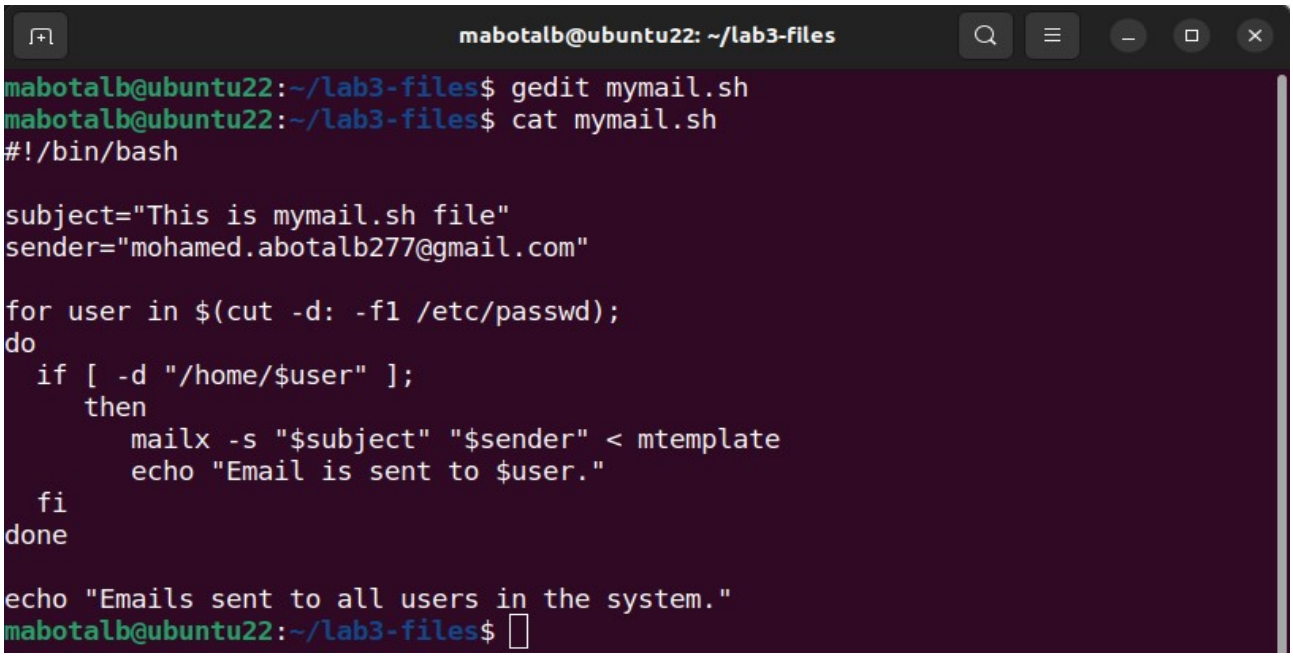


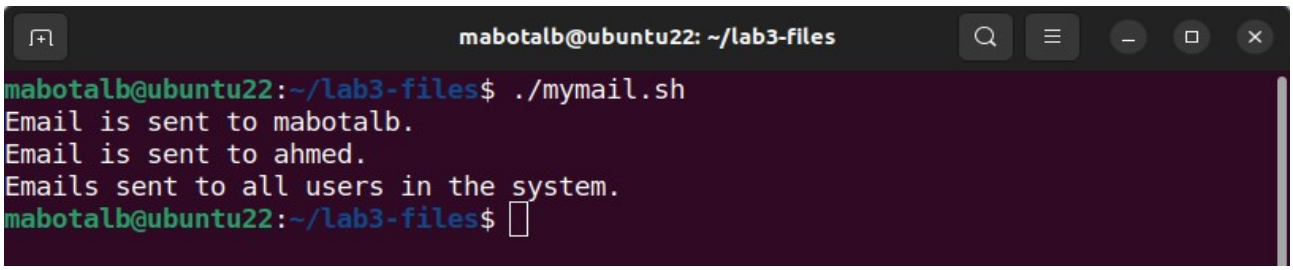

## 4. Write a script called mybackup using for utility to create a backup of only files in your home directory.



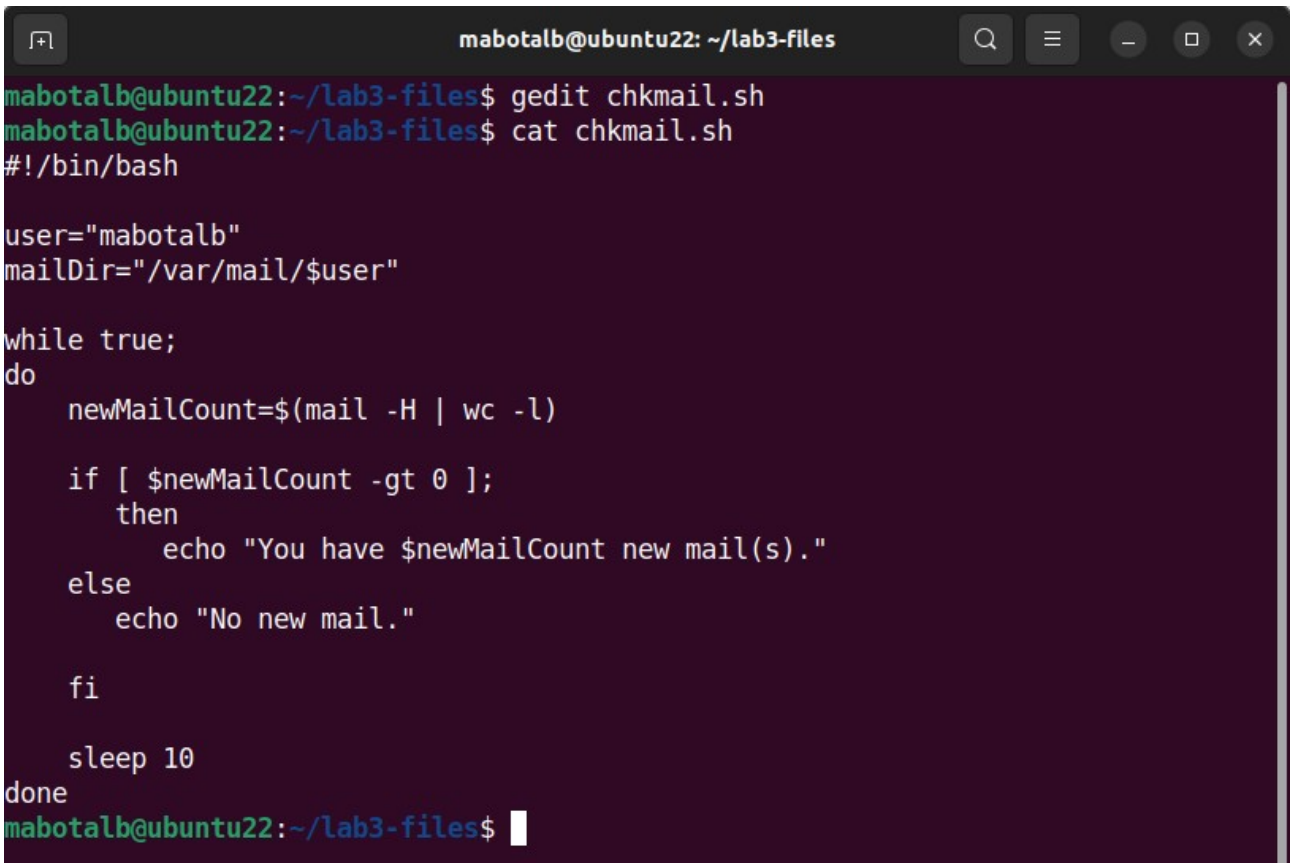


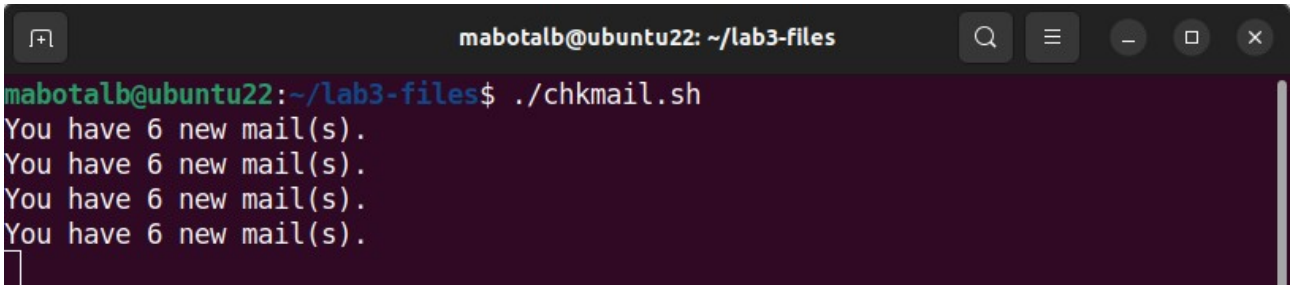

## 5. Write a script called mymail using for utility to send a mail to all users in the system.



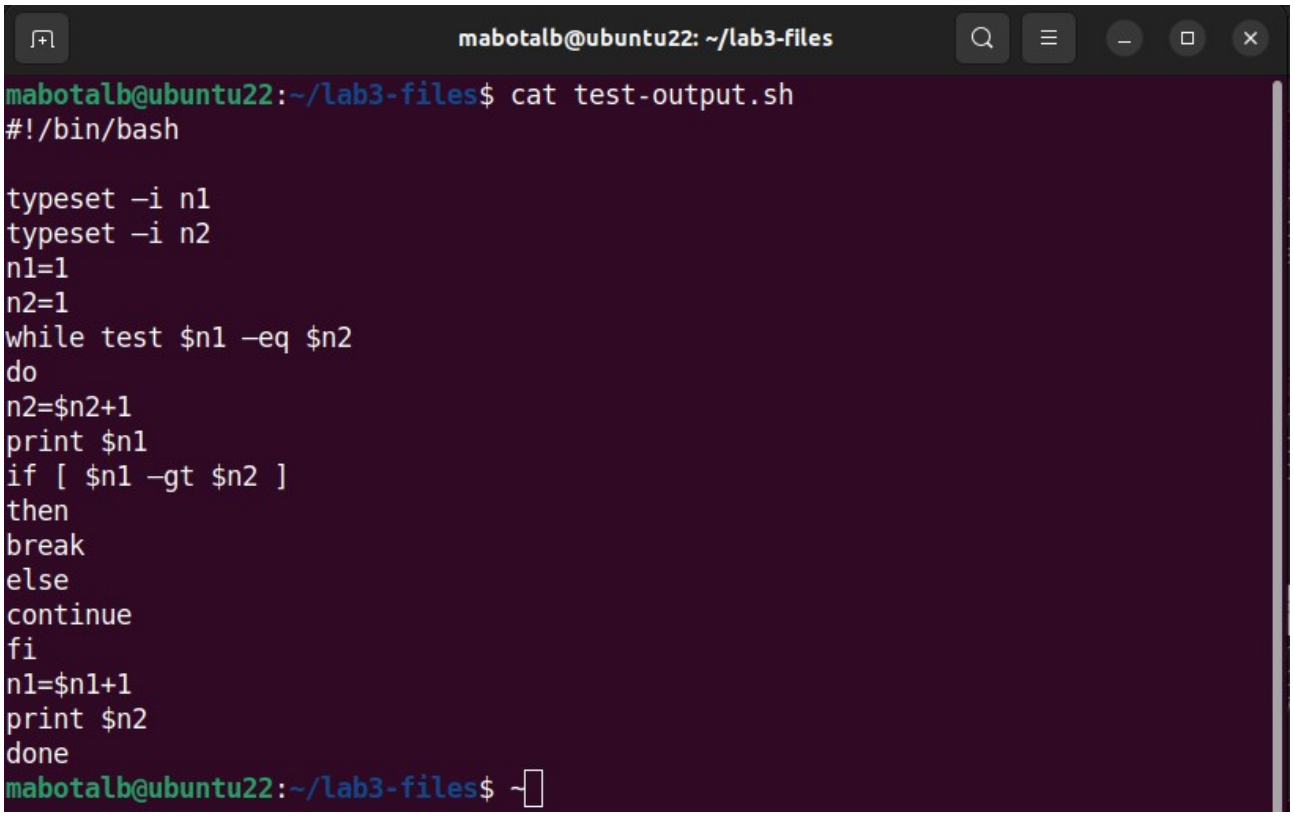



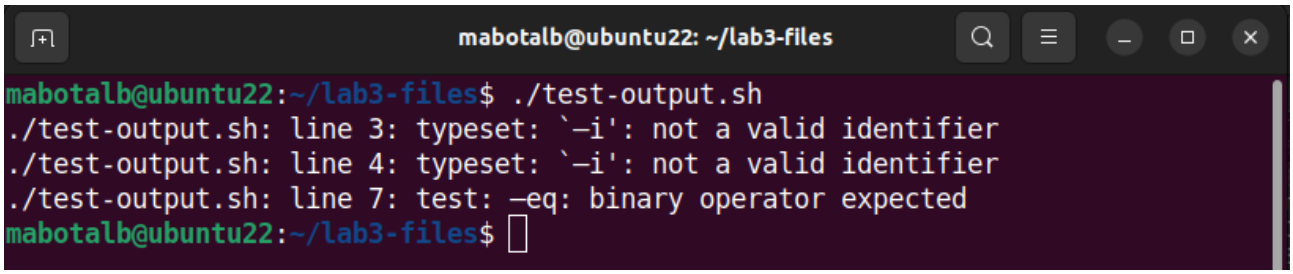

## 6. Write a script called chkmail to check for new mails every 10 seconds.

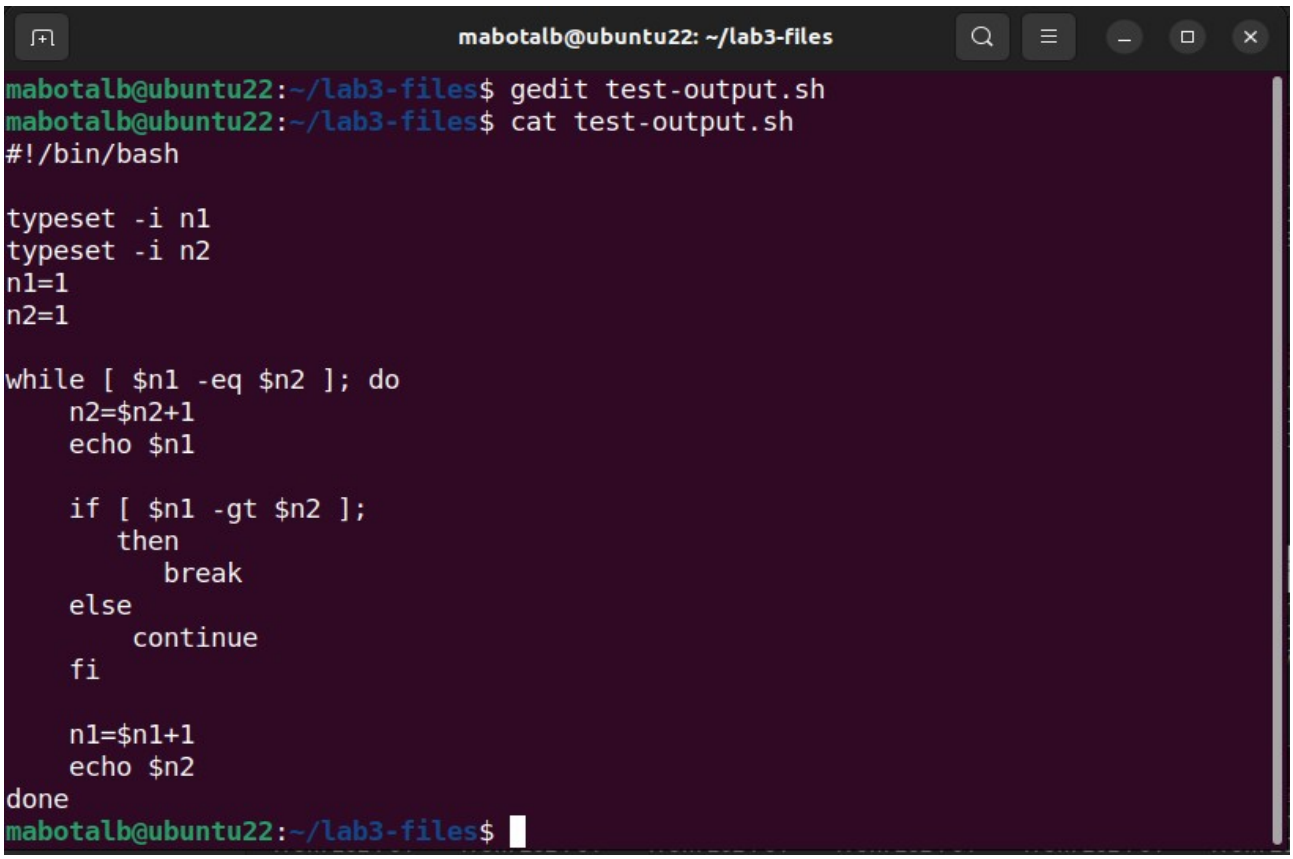

mabotalb@ubuntu22: ~/lab3-files
mabotalb@ubuntu22:~/lab3-files$ gedit chkmail.sh
mabotalb@ubuntu22:~/lab3-files$ cat chkmail.sh
#!/bin/bash
user="mabotalb"
mailDir="/var/mail/$user"
while true;
do
newMailCount=$(mail -H | wc -l)
if [ $newMailCount -gt 0 ];
then
echo "You have $newMailCount new mail(s)."
else
echo "No new mail."
fi
sleep 10
done
mabotalb@ubuntu22:~/lab3-files$

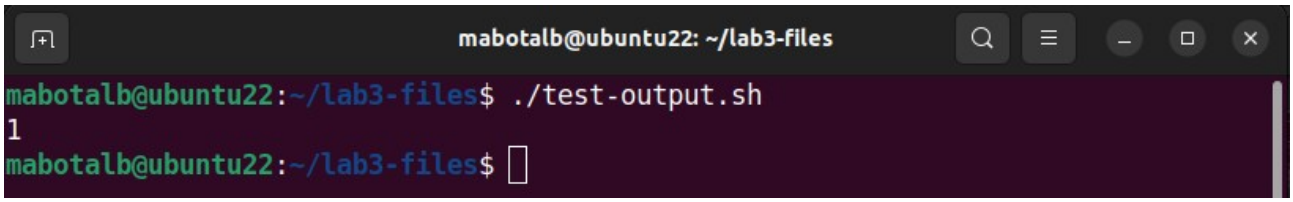

mabotalb@ubuntu22: ~/lab3-files
mabotalb@ubuntu22:~/lab3-files$ ./chkmail.sh
You have 6 new mail(s).
You have 6 new mail(s).
You have 6 new mail(s).
You have 6 new mail(s).

# 7. What is the output of the following script





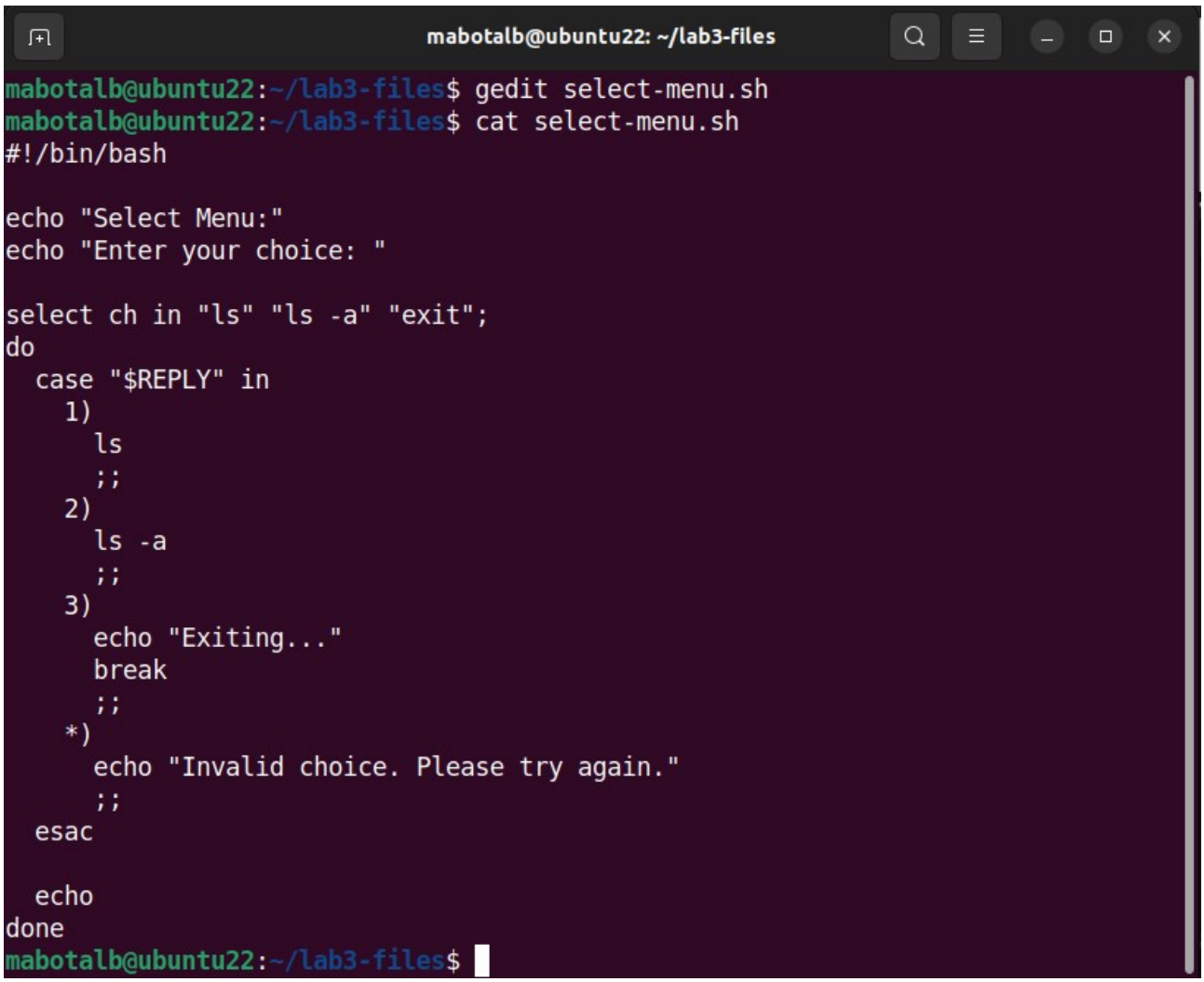



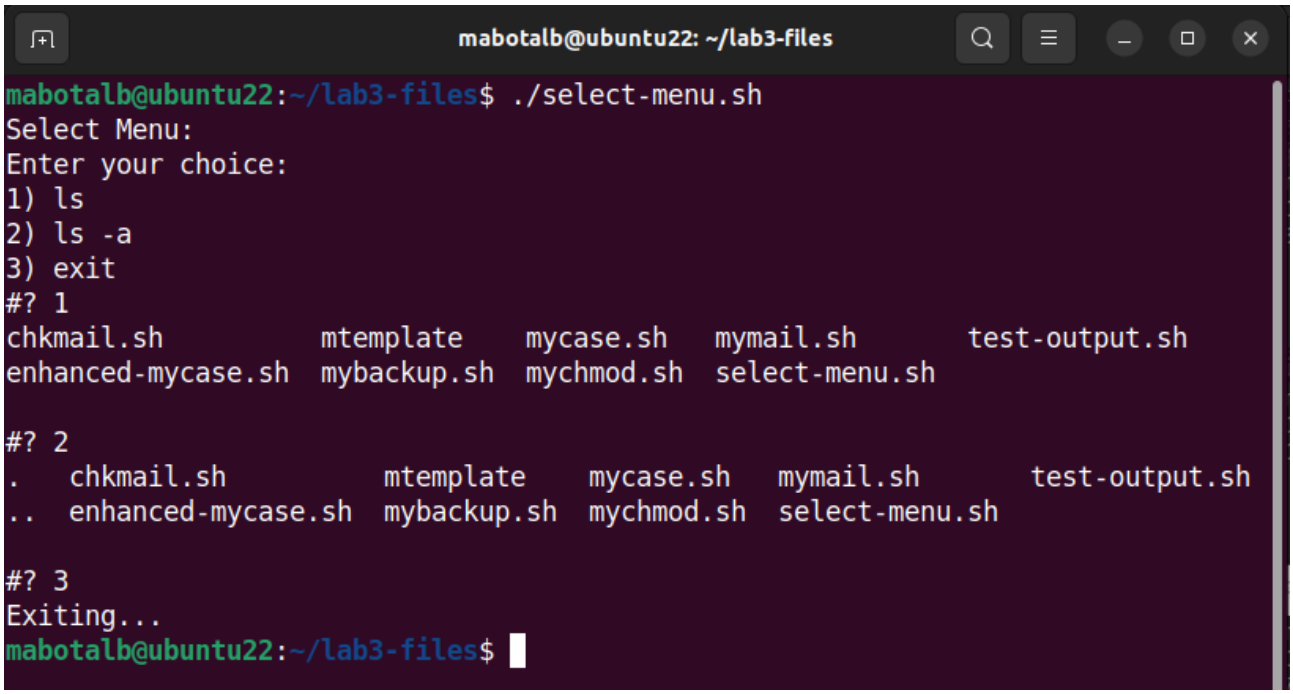

**8. Create the following menu:**

**a. Press 1 to ls**

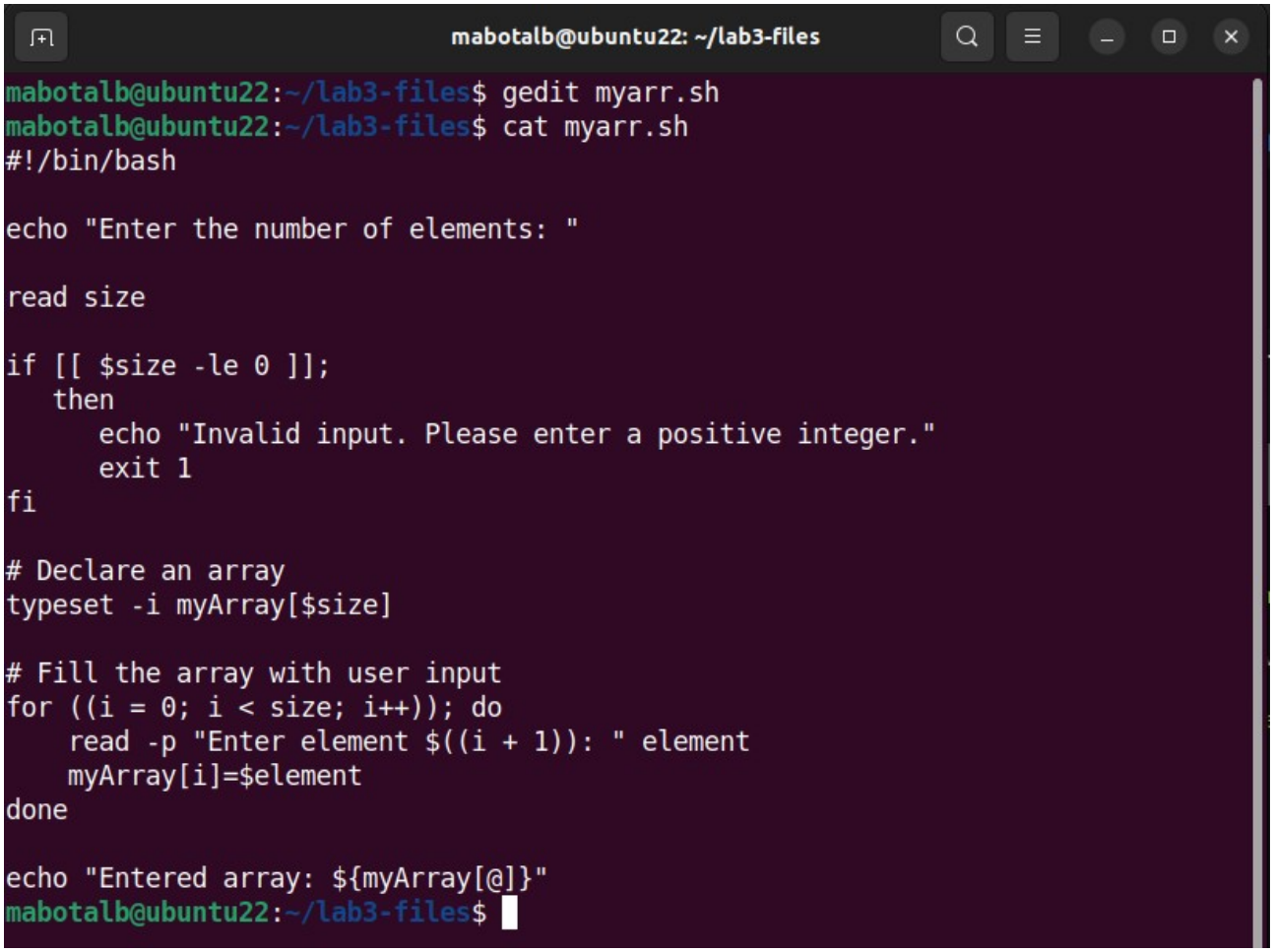
**b. Press 2 to ls –a**

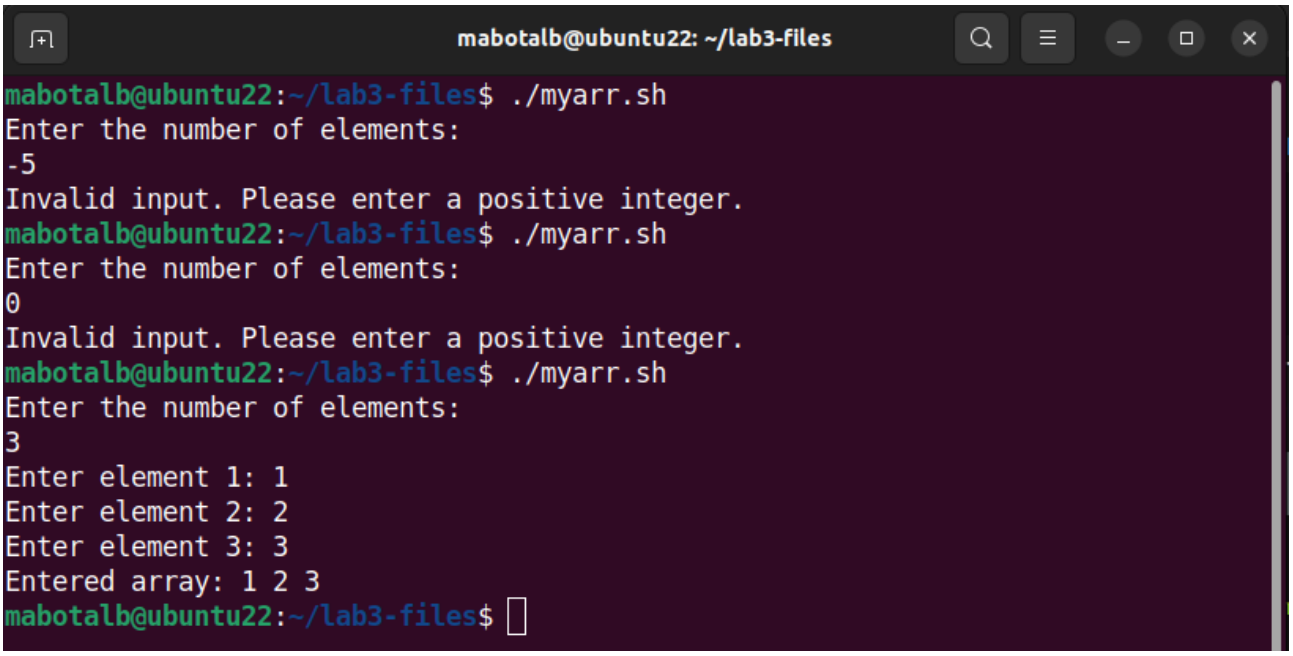
**c. Press 3 to exit**


mabotalb@ubuntu22: ~/lab3-files
mabotalb@ubuntu22:~/lab3-files$ gedit select-menu.sh
mabotalb@ubuntu22:~/lab3-files$ cat select-menu.sh
#!/bin/bash
echo "Select Menu:"
echo "Enter your choice: "
select ch in "ls" "ls -a" "exit";
do
case "$REPLY" in
1)
ls
;;
2)
ls -a
;;
3)
echo "Exiting..."
break
;;
*)
echo "Invalid choice. Please try again."
;;
esac
echo
done
mabotalb@ubuntu22:~/lab3-files$

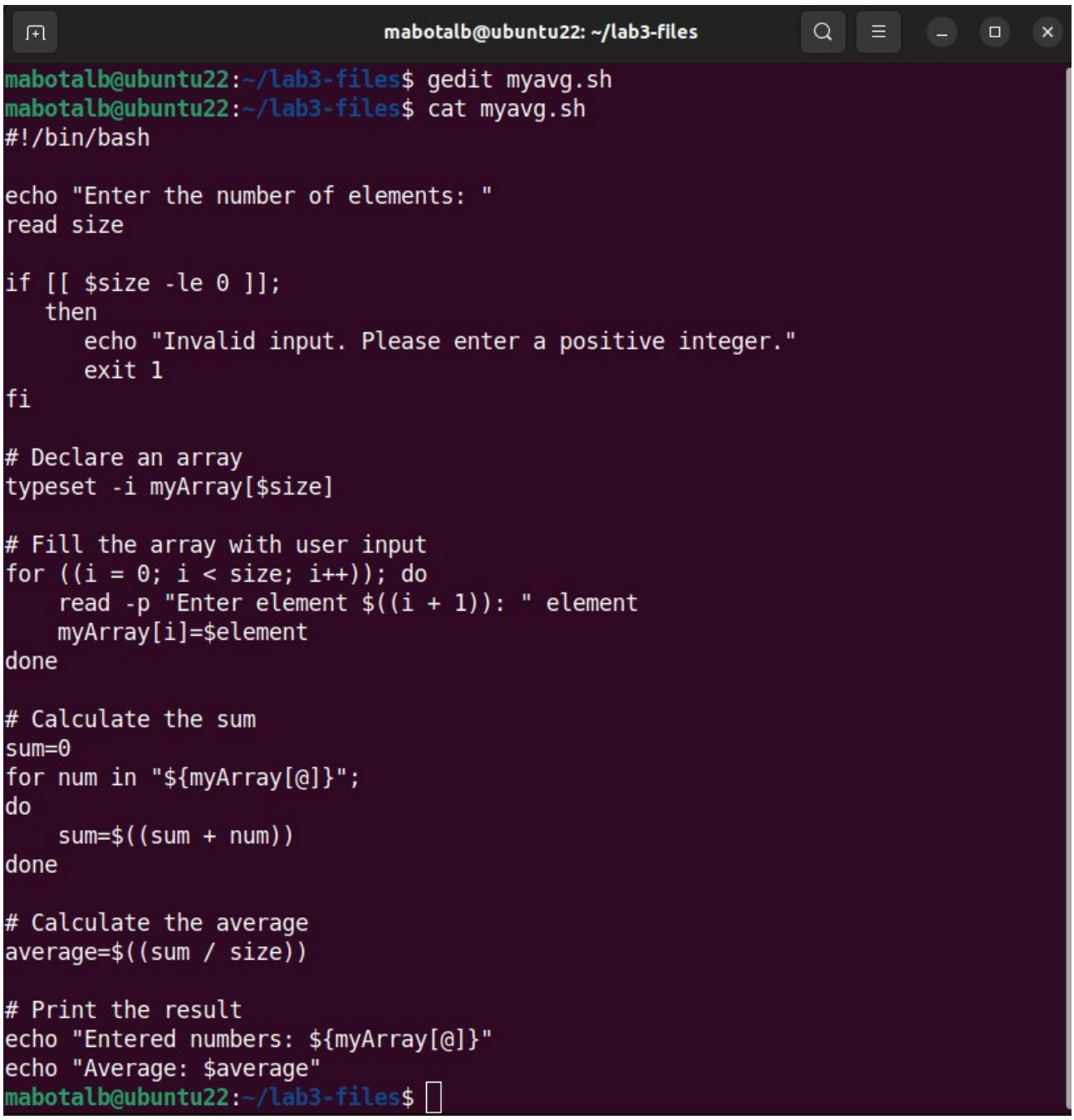

mabotalb@ubuntu22: ~/lab3-files
mabotalb@ubuntu22:~/lab3-files$ ./select-menu.sh
Select Menu:
Enter your choice:
1) ls
2) ls -a
3) exit
#? 1
chkmail.sh mtemplate mycase.sh mymail.sh test-output.sh
enhanced-mycase.sh mybackup.sh mychmod.sh select-menu.sh
#? 2
. chkmail.sh mtemplate mycase.sh mymail.sh test-output.sh
.. enhanced-mycase.sh mybackup.sh mychmod.sh select-menu.sh
#? 3
Exiting...
mabotalb@ubuntu22:~/lab3-files$

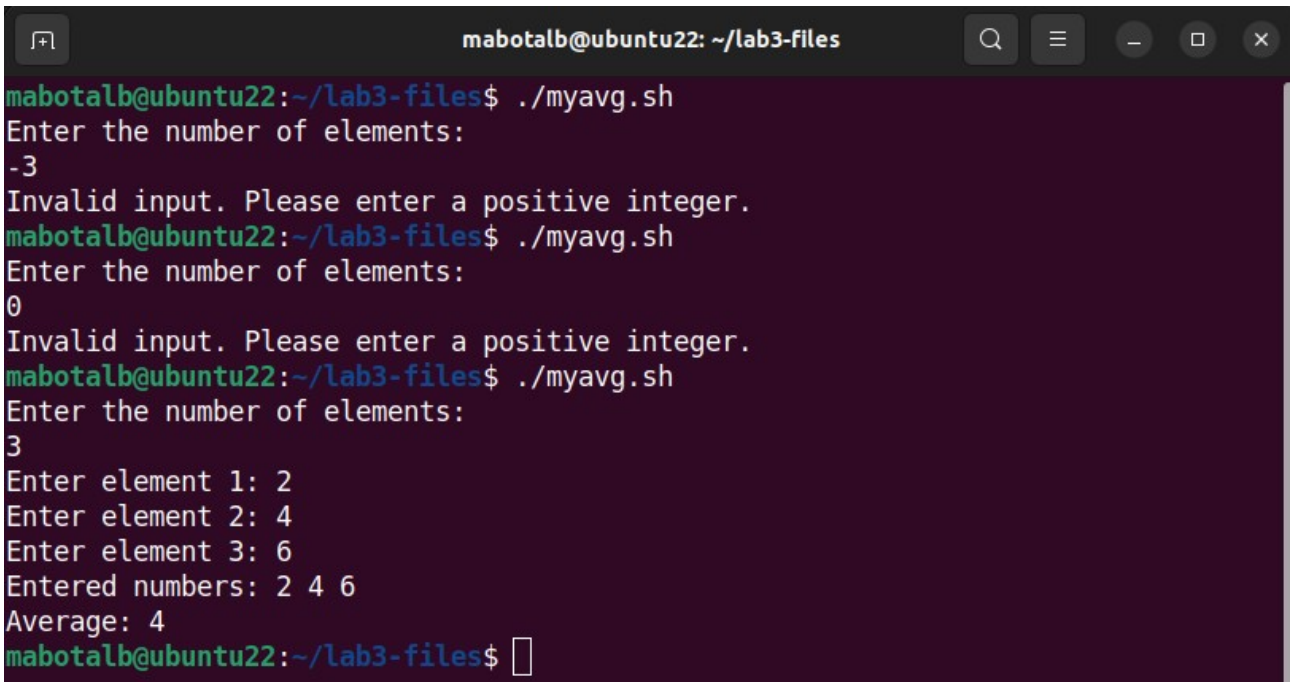
**9. Write a script called myarr that ask a user how many elements he wants to enter in an array, fill the array and then print it.**



## 10.Write a script called myavg that calculate average of all numbers entered by a user.






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