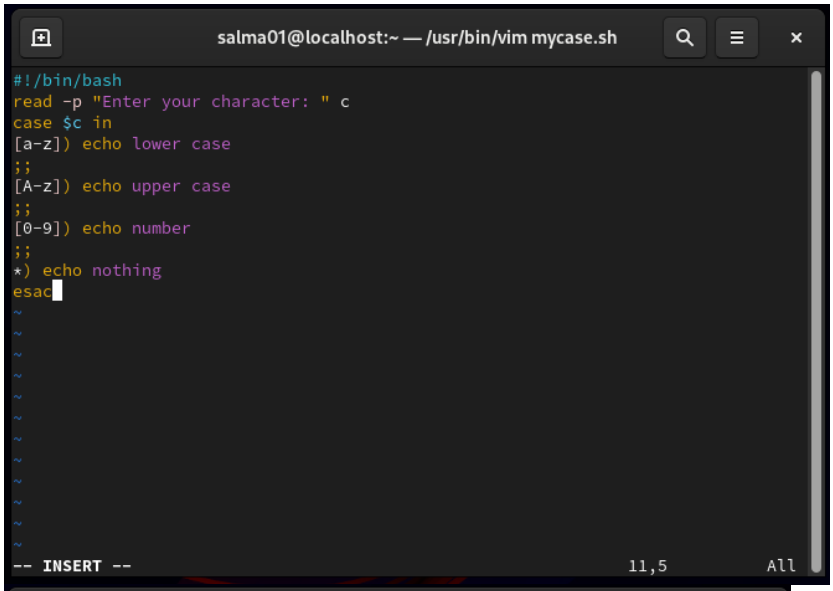
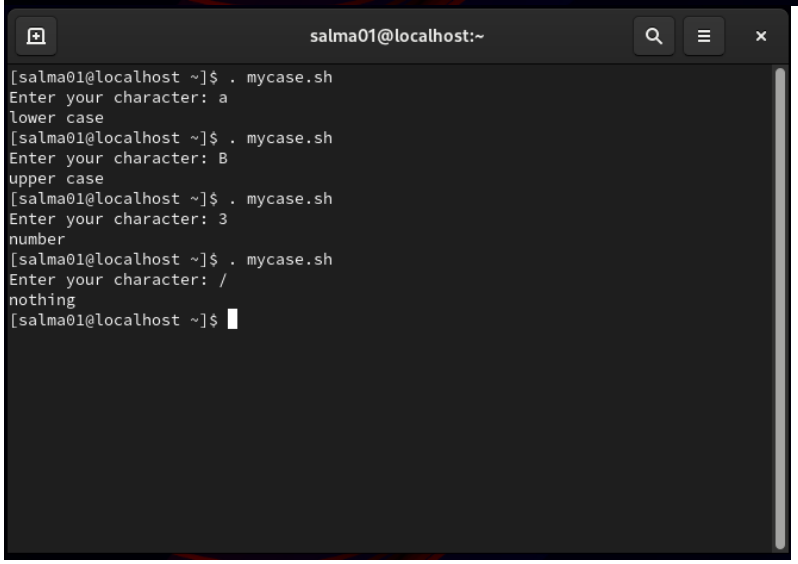
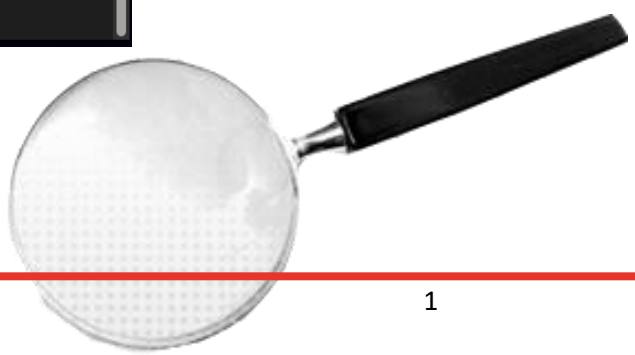
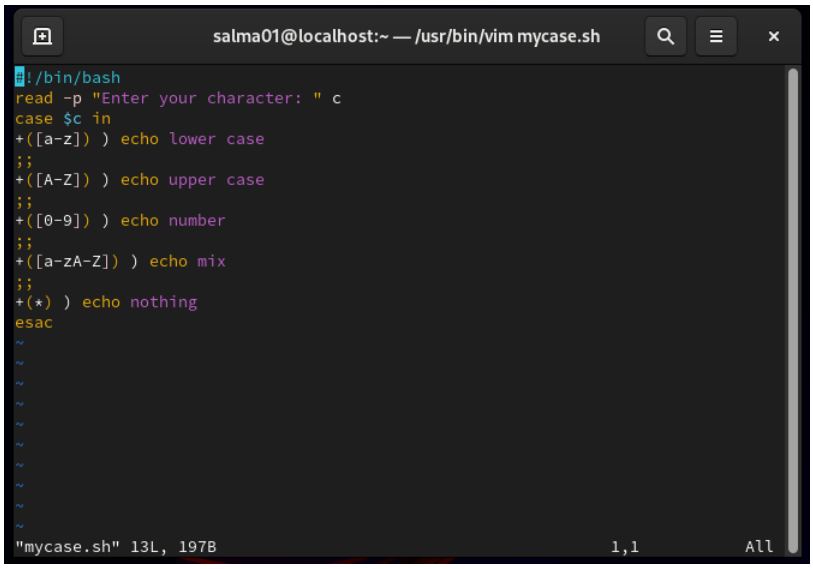
1. Write a script called mycase, using the case utility to checks the type of character entered by a user:
    a. Upper Case.
    b. Lower Case.
    c. Number.
    d. Nothing.

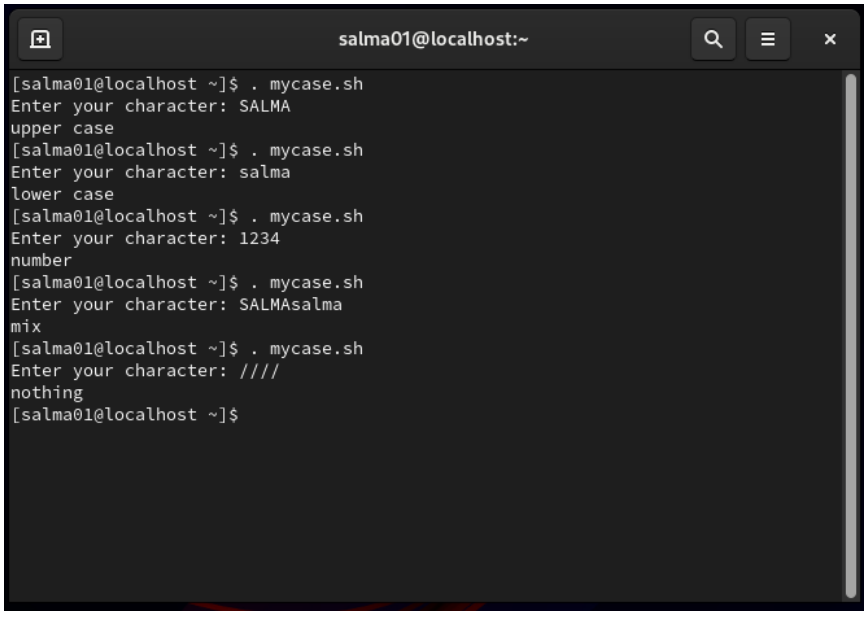




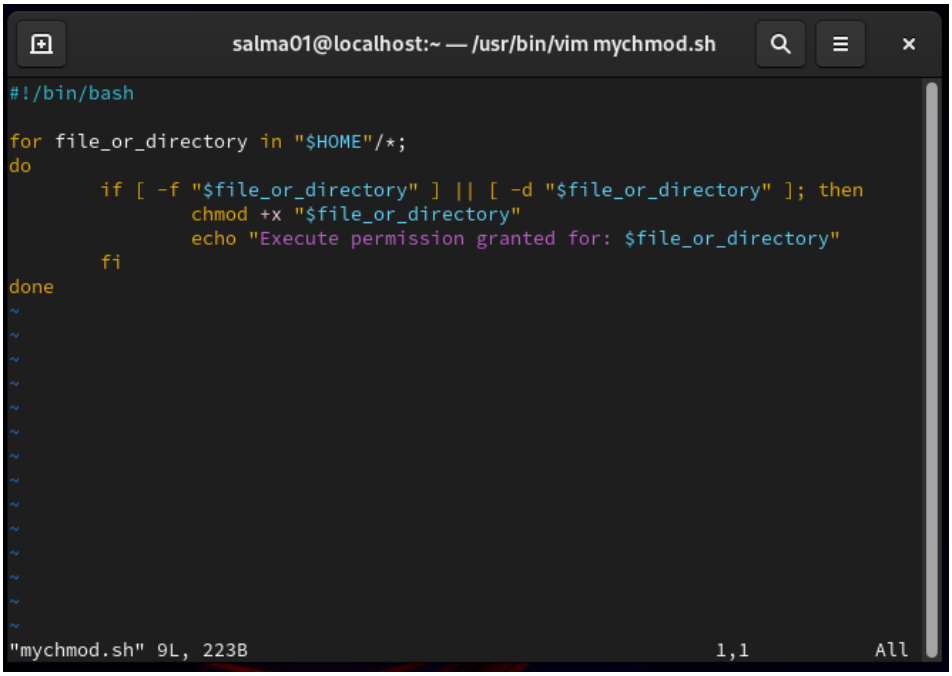


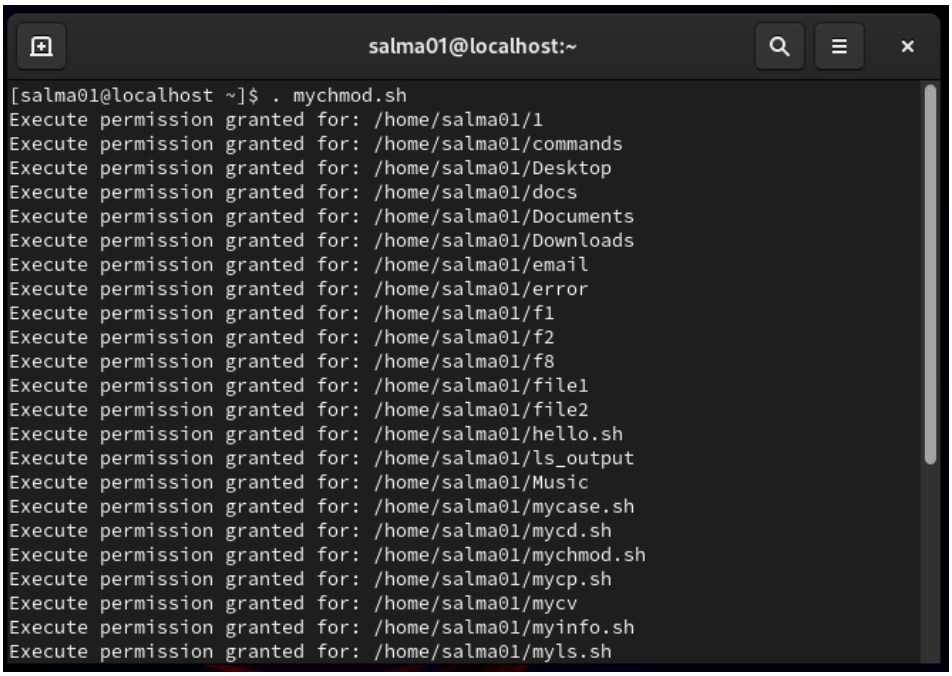
2. Enhanced the previous script, by checking the type of string entered by a user:
    a. Upper Cases.
    b. Lower Cases.
    c. Numbers.
    d. Mix.
    e. Nothing.

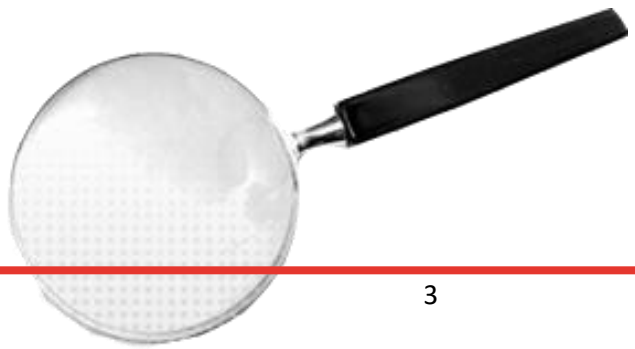




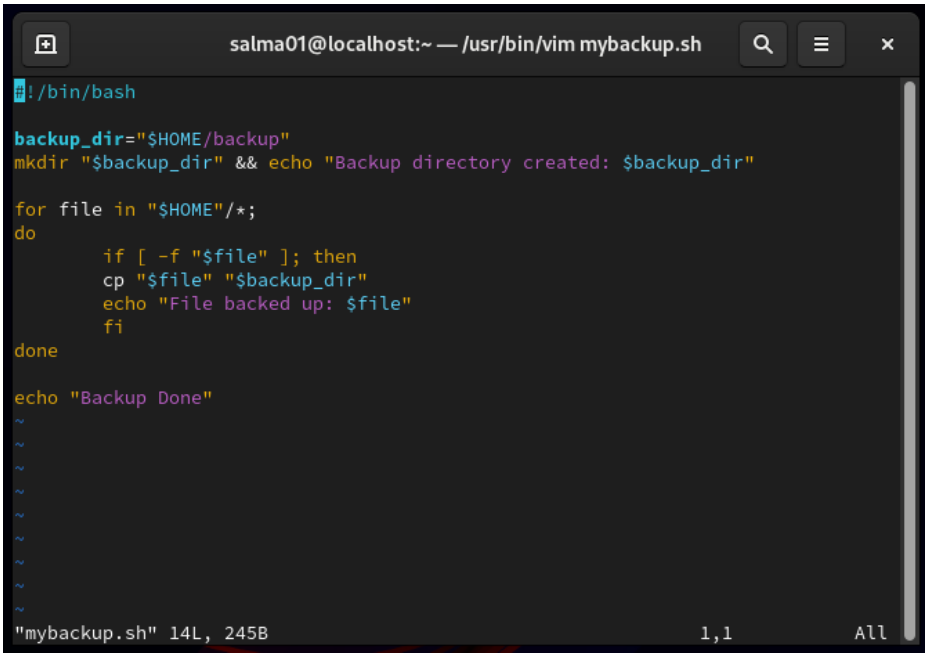
3. Write a script called mychmod using for utility to give execute permission to all files and directories in your home directory.

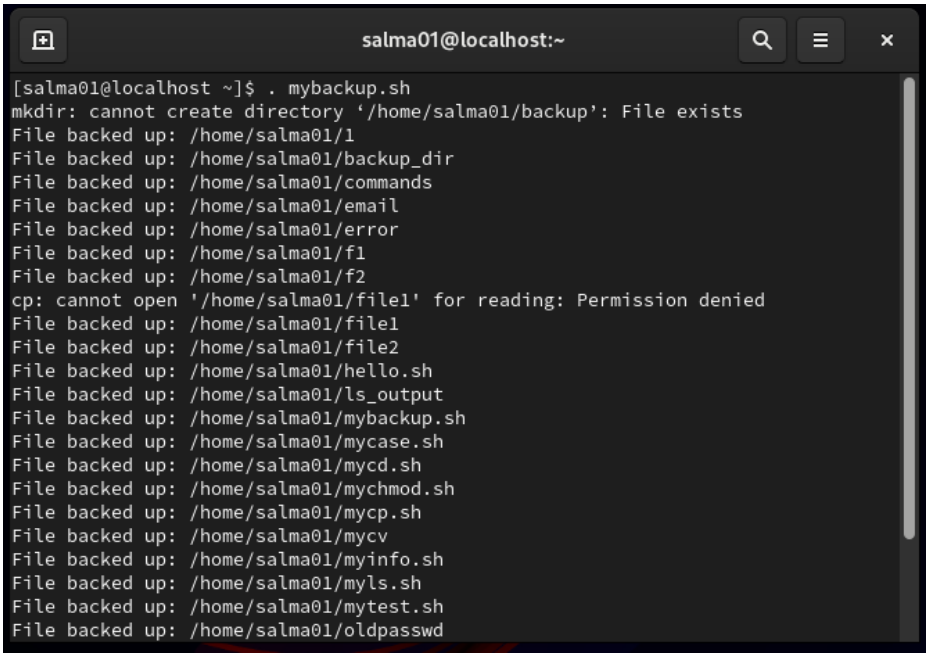


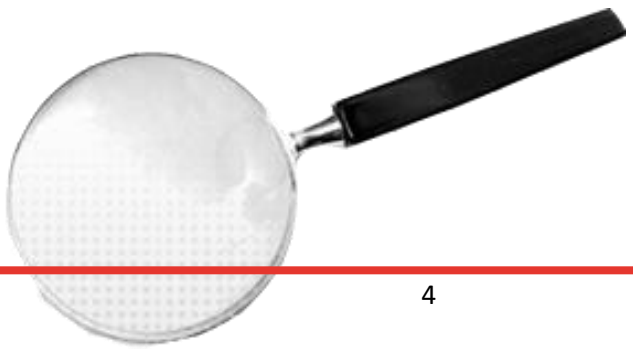




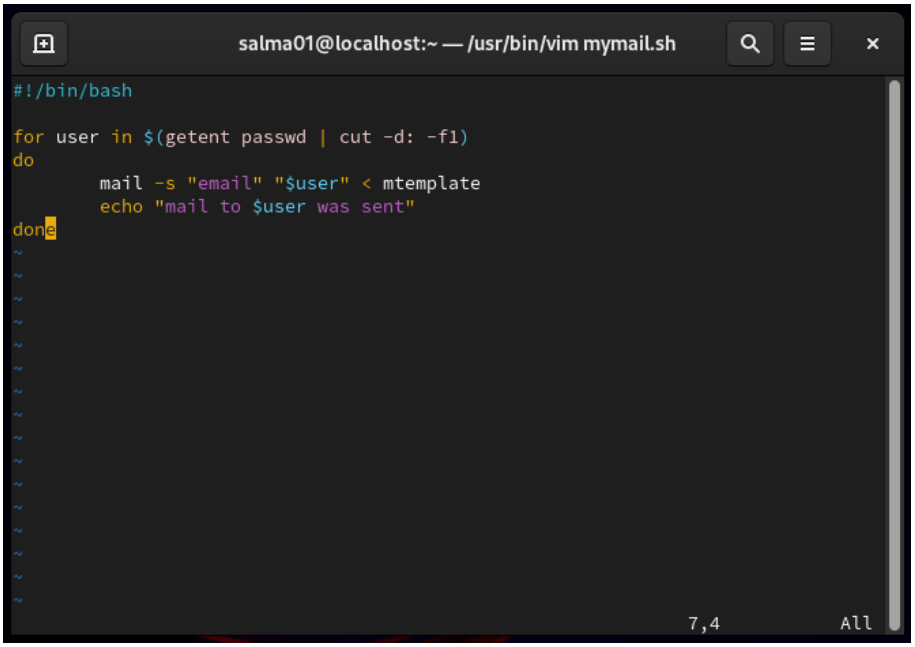
4. Write a script called mybackup using for utility to create a backup of only files in your home directory.

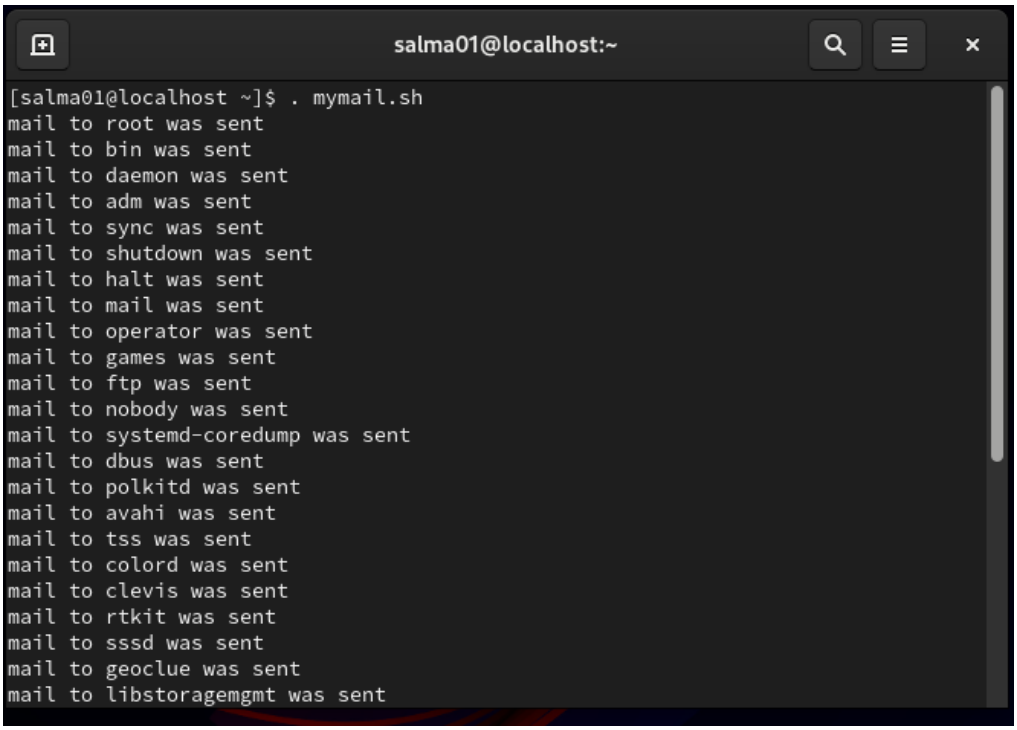


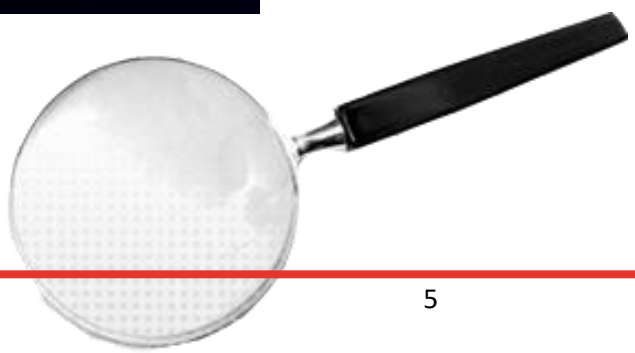




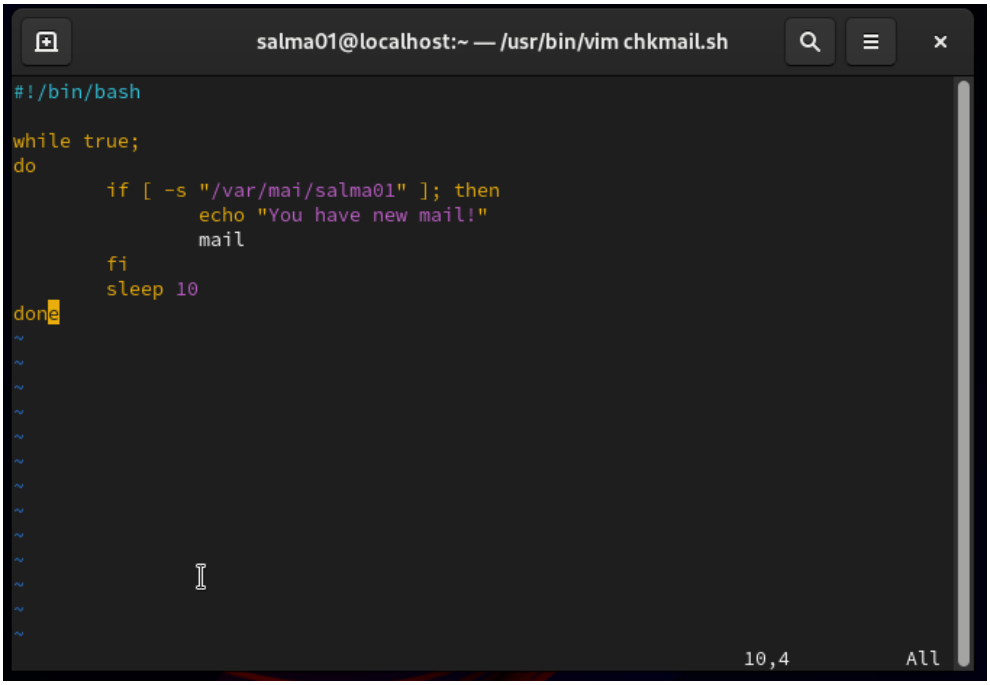
5. Write a script called mymail using for utility to send a mail to all users in the system.
   Note: write the mail body in a file called mtemplate.

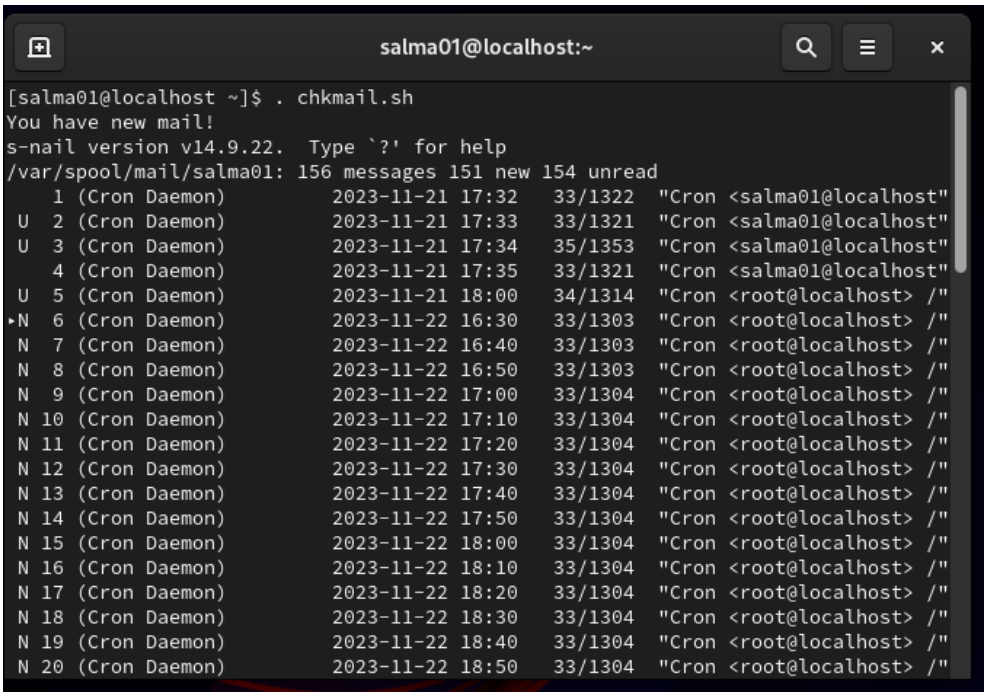


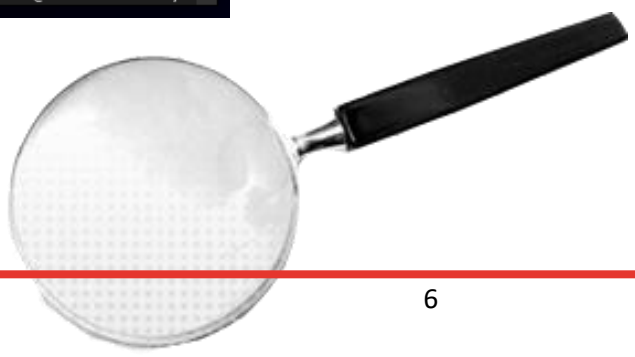




6. Write a script called chkmail to check for new mails every 10 seconds. Note: mails are saved in /var/mail/username.



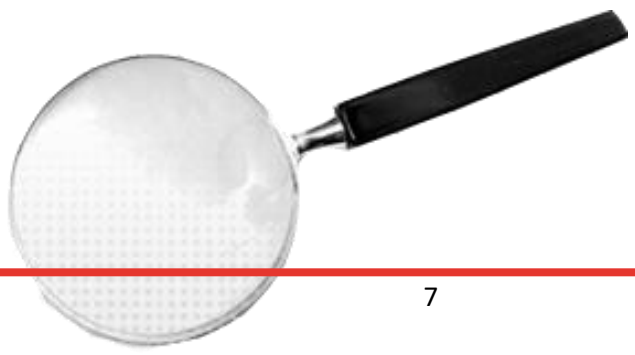




7. What is the output of the following script

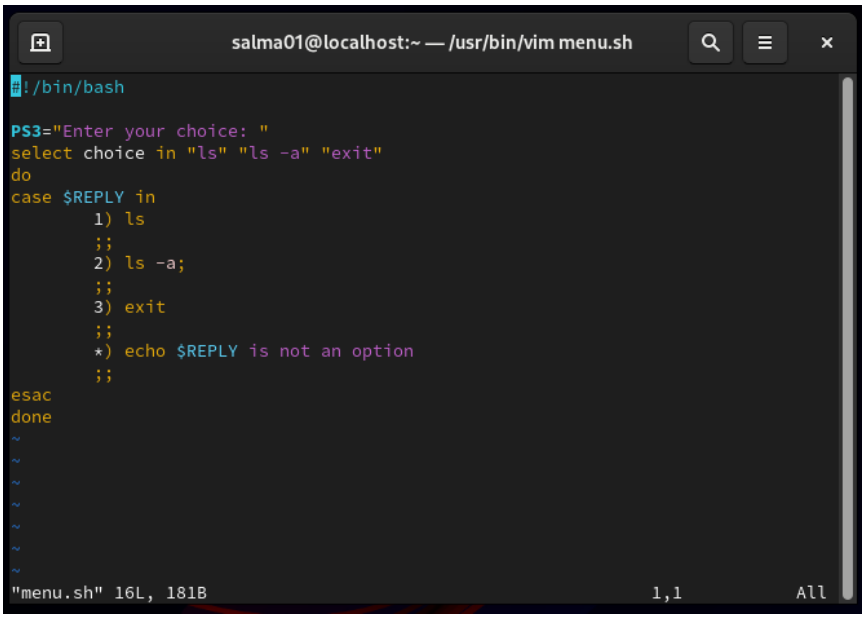
```
typeset -i n1
typeset -i n2
n1=1
n2=1
while test $n1 -eq $n2
do
    n2=$n2+1
    print $n1
if [ $n1 -gt $n2 ]
then
    break
else
    continue
fi
n1=$n1+1
print $n2
done
```

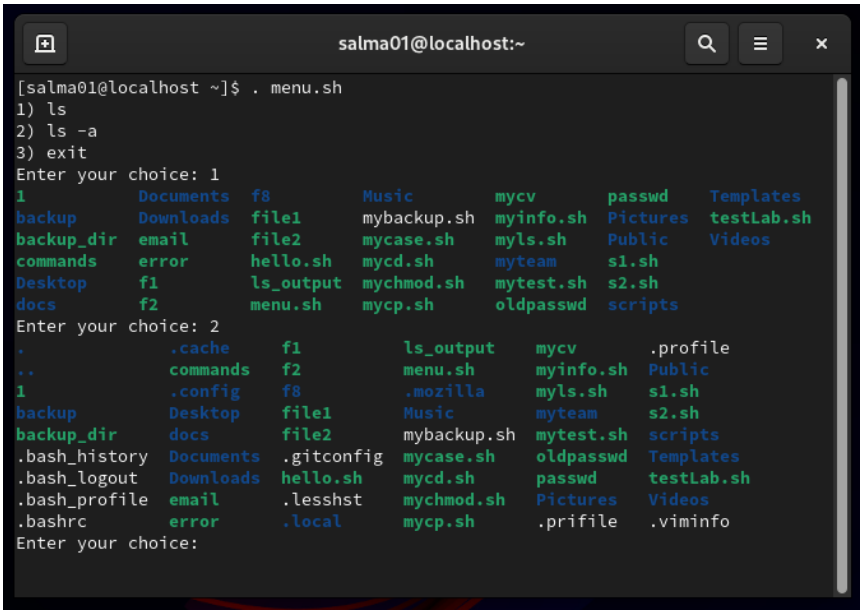
output -> it will print 1 as it printed n1 only due to the continue statement.

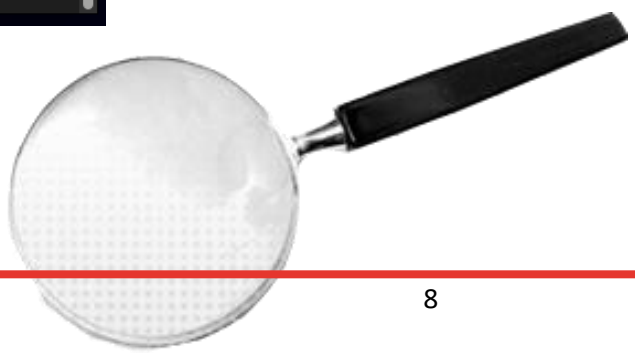


8. Create the following menu:
    a. Press 1 to ls
    b. Press 2 to ls –a
    c. Press 3 to exit

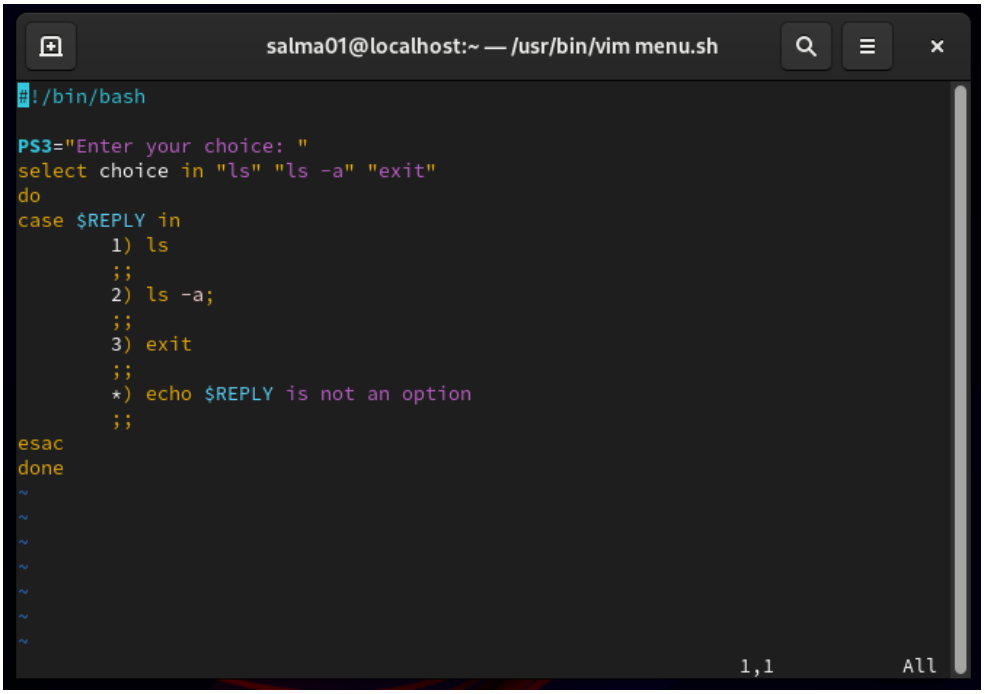
Using select utility then while utility.

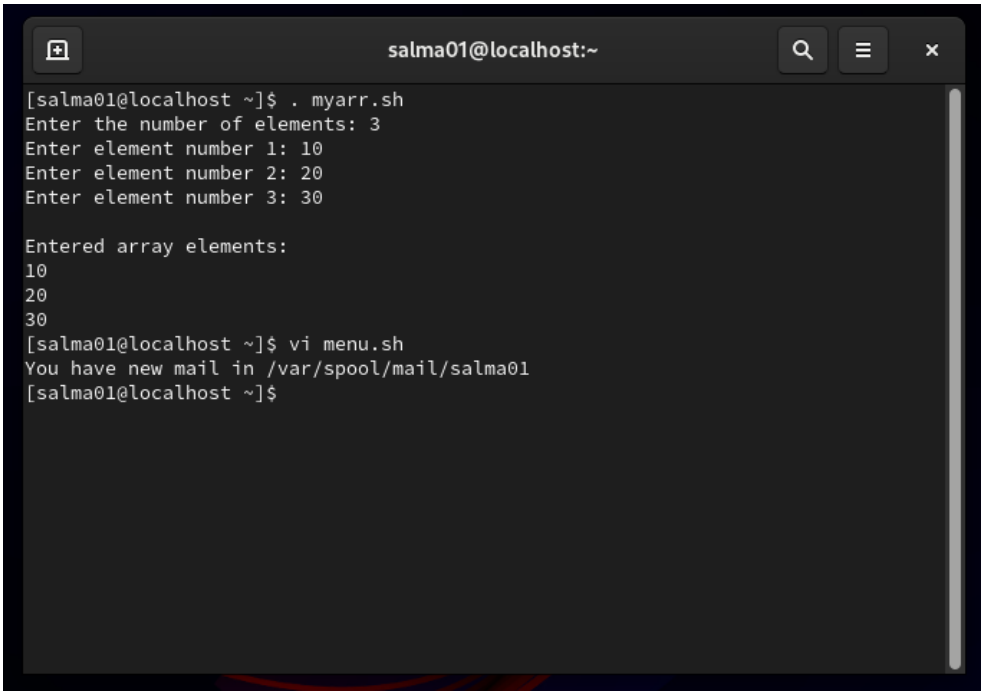


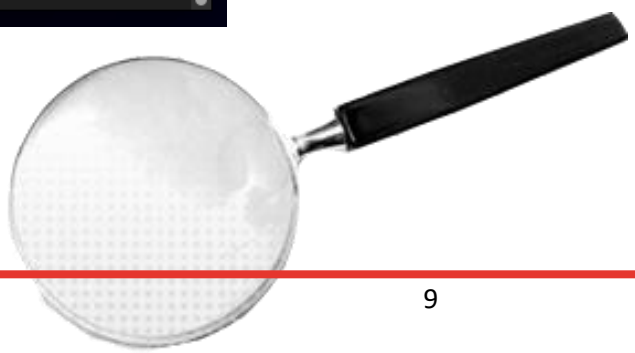




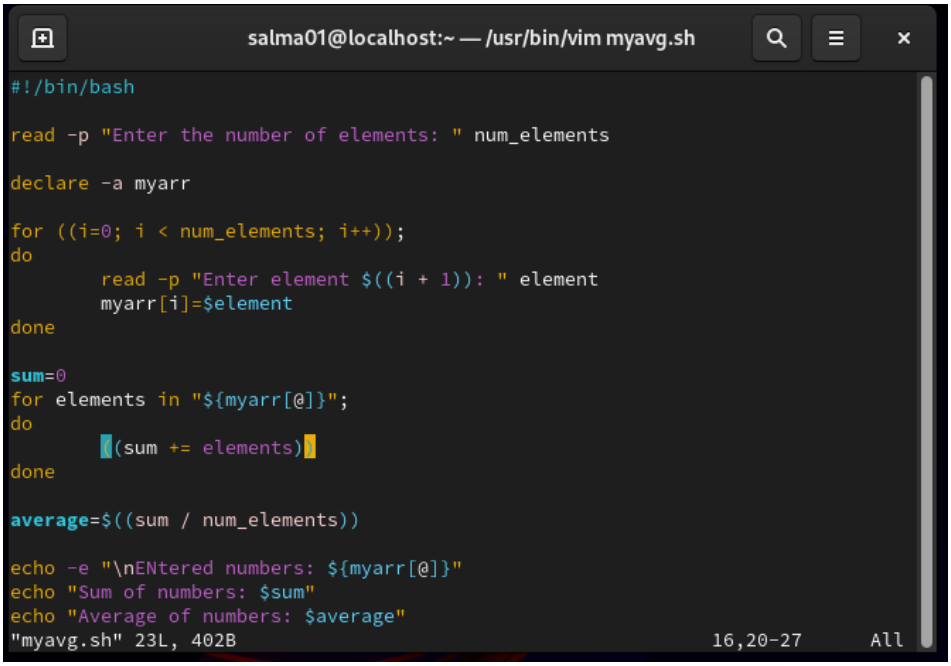
9. Write a script called myarr that ask a user how many elements he wants to enter in an array, fill the array and then print it.

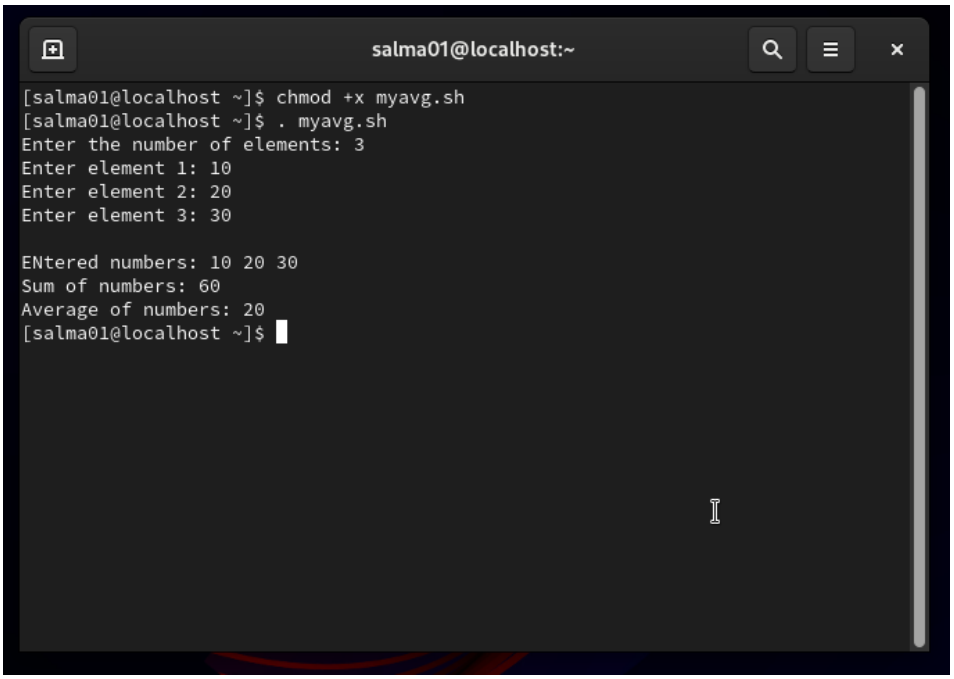


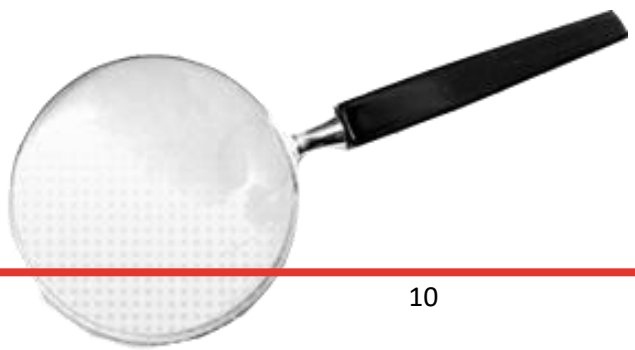




10. Write a script called myavg that calculate average of all numbers entered by a user.
    Note: use arrays.







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