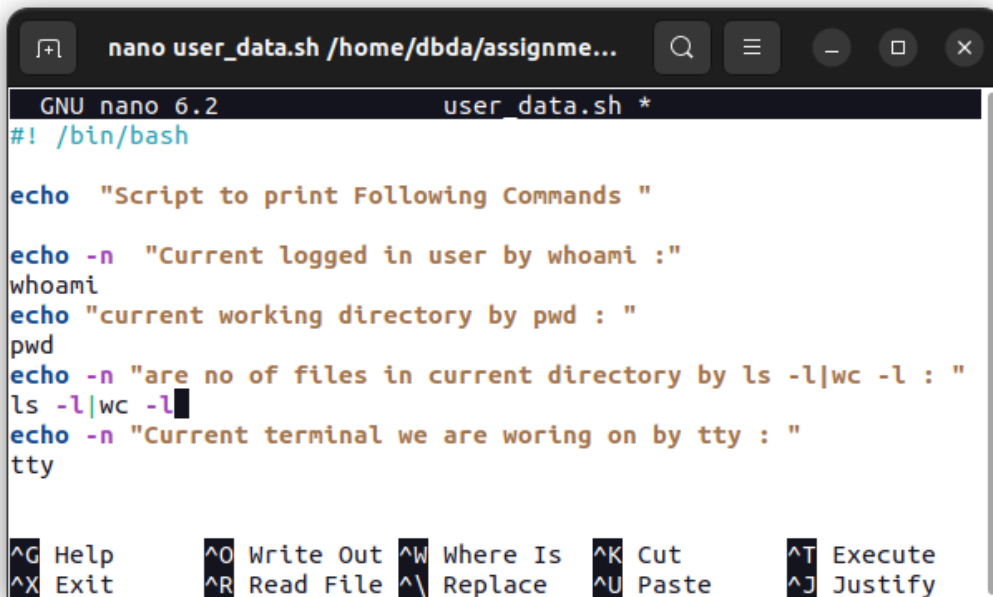**ASS-4**

1) Write a shell script to print

- your are logged in as which user
- in which directory you are
- and in which terminal you are working
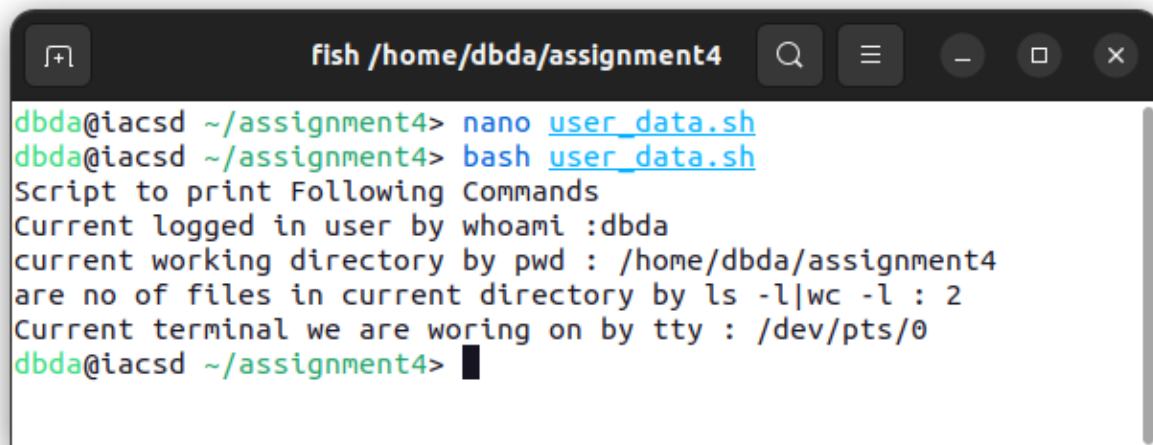- total number of files and directories in current directory

```
GNU nano 6.2                    user_data.sh *
#! /bin/bash

echo  "Script to print Following Commands "

echo -n  "Current logged in user by whoami :"
whoami
echo "current working directory by pwd : "
pwd
echo -n "are no of files in current directory by ls -l|wc -l : "
ls -l|wc -l
echo -n "Current terminal we are woring on by tty : "
tty


^G Help       ^O Write Out ^W Where Is   ^K Cut        ^T Execute
^X Exit       ^R Read File ^\ Replace    ^U Paste      ^J Justify
```

```
dbda@iacsd ~/assignment4> nano user_data.sh
dbda@iacsd ~/assignment4> bash user_data.sh
Script to print Following Commands
Current logged in user by whoami :dbda
current working directory by pwd : /home/dbda/assignment4
are no of files in current directory by ls -l|wc -l : 2
Current terminal we are woring on by tty : /dev/pts/0
dbda@iacsd ~/assignment4>
```

2).Write a shell script to create a menu driven program for adding, deletion or finding a record in a database. Database should have the field like rollno, name, semester and marks of three subjects. Last option of the menu should be to exit the menu.

```bash
  GNU nano 6.2                                         user.sh *
#! /bin/bash

while true
do
read -p "to add student press 1 |to del press 2 | to find press 3 | to see all data press4 |press 5 to exit :" n
case $n in
        1)
                echo "enter data as follows"
                read -p "rollno,name,sem,sub1_marks,sub2_marks,sub3_marks :" data
                echo $data >> data.csv
        ;;
        2)
                read -p "enter name to delete data" data
                sed -i "/$data/d" data.csv
        ;;
        3)
                read -p "enter name you want to find" data
                grep $data data.csv
        ;;
        4)
                cat data.csv
        ;;
        5)
                break
        ;;
esac
done

^G Help      ^O Write Out    ^W Where Is    ^K Cut      ^T Execute    ^C Location    M-U Undo
^X Exit      ^R Read File    ^\ Replace     ^U Paste    ^J Justify    ^/ Go To Line  M-E Redo
```

```
dbda@iacsd:~/assignment4$ nano user.sh
dbda@iacsd:~/assignment4$ bash user.sh
to add student press 1 |to del press 2 | to find press 3 | to see all data press4 |press 5 to exit :1
enter data as follows
rollno,name,sem,sub1_marks,sub2_marks,sub3_marks :16,Chandan,4,99,99,99
to add student press 1 |to del press 2 | to find press 3 | to see all data press4 |press 5 to exit :1
enter data as follows
rollno,name,sem,sub1_marks,sub2_marks,sub3_marks :24,Aayush,3,89,87,78
to add student press 1 |to del press 2 | to find press 3 | to see all data press4 |press 5 to exit :4
rollno,name,sem,sub1_marks,sub2_marks,sub3_marks

16,Chandan,4,99,99,99
24,Aayush,3,89,87,78
to add student press 1 |to del press 2 | to find press 3 | to see all data press4 |press 5 to exit :2
enter name to delete dataAayush
to add student press 1 |to del press 2 | to find press 3 | to see all data press4 |press 5 to exit :4
rollno,name,sem,sub1_marks,sub2_marks,sub3_marks

16,Chandan,4,99,99,99
to add student press 1 |to del press 2 | to find press 3 | to see all data press4 |press 5 to exit :1
enter data as follows
rollno,name,sem,sub1_marks,sub2_marks,sub3_marks :25,Piyush,4,67,87,98
to add student press 1 |to del press 2 | to find press 3 | to see all data press4 |press 5 to exit :3
enter name you want to findChandan
16,Chandan,4,99,99,99
to add student press 1 |to del press 2 | to find press 3 | to see all data press4 |press 5 to exit :5
dbda@iacsd:~/assignment4$
```
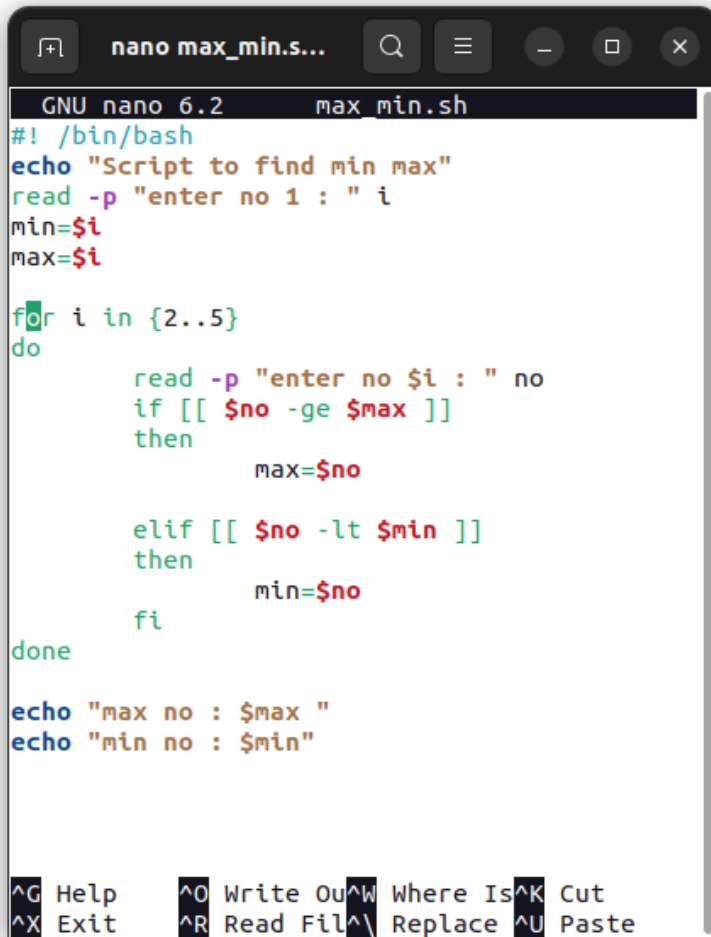
3) Write a Linux shell script to accept 10 number and tell how many are +tive, -tive and zero.


```bash
#! /bin/bash
echo "To find positive negative and zero in 10 no "
pos=0
neg=0
zerp=0
for i in {1..10}
do
        read -p "enter no $i :- " a
        if [[ $a -gt 0 ]]
        then
                ((pos+=1))
        elif [[ $a -lt 0 ]]
        then
                ((neg+=1))
        else
                ((zerp+=1))
        fi
done
echo "There are $pos nos which are  positive"
echo "There are $neg nos which are  negative"
echo "There are $zerp nos which are  zero"
```



```
dbda@iacsd ~/assignment4> nano pos.sh

        dbda@iacsd ~/assignment4> bash pos.sh
To find positive negative and zero in 10 no
enter no 1 :- 10
enter no 2 :- 20
enter no 3 :- 30
enter no 4 :- -85
enter no 5 :- 46
enter no 6 :- 0
enter no 7 :- -9
enter no 8 :- -5
enter no 9 :- 0
enter no 10 :- 0
There are 4 nos which are  positive
There are 3 nos which are  negative
There are 3 nos which are  zero
dbda@iacsd ~/assignment4>
```

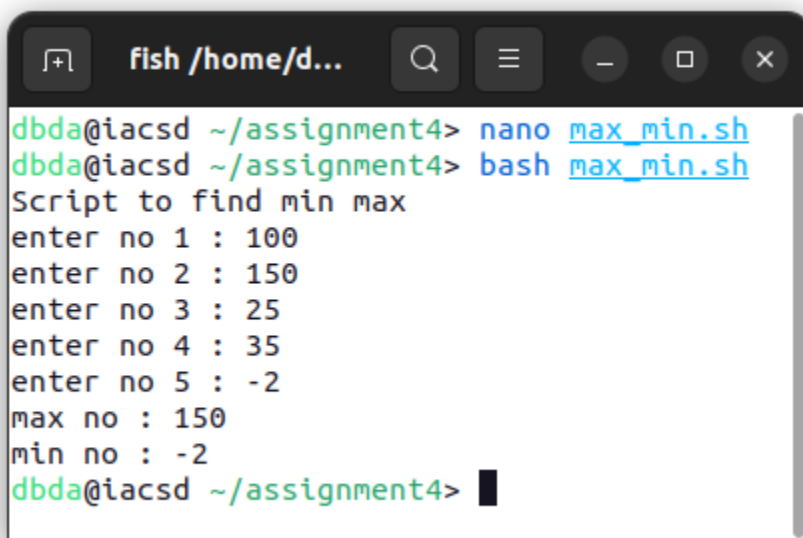4) Write a shell script to accept five number and display max and min value.

```
GNU nano 6.2            max_min.sh
#! /bin/bash
echo "Script to find min max"
read -p "enter no 1 : " i
min=$i
max=$i

for i in {2..5}
do
        read -p "enter no $i : " no
        if [[ $no -ge $max ]]
        then
                max=$no

        elif [[ $no -lt $min ]]
        then
                min=$no
        fi
done

echo "max no : $max "
echo "min no : $min"
```
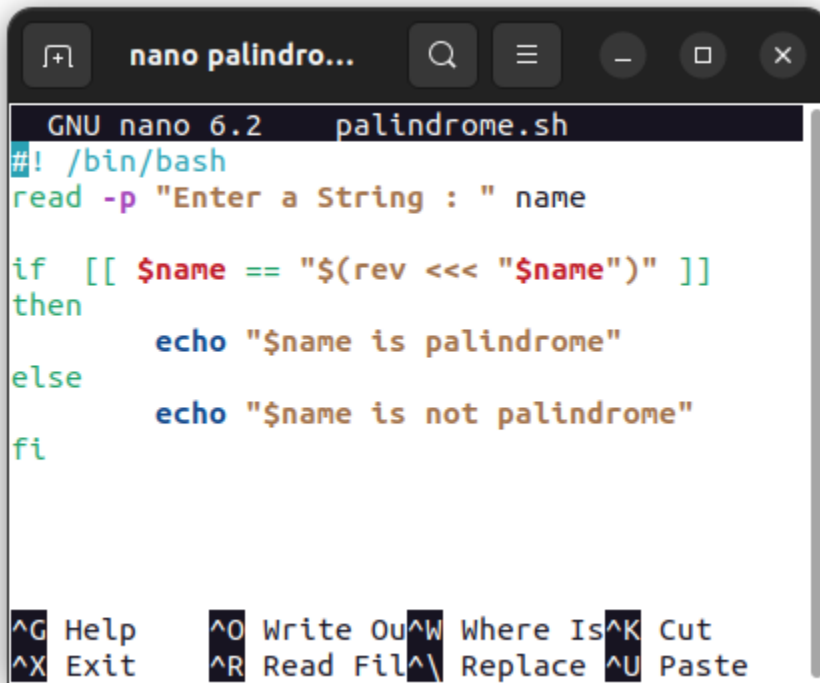
```
dbda@iacsd ~/assignment4> nano max_min.sh
dbda@iacsd ~/assignment4> bash max_min.sh
Script to find min max
enter no 1 : 100
enter no 2 : 150
enter no 3 : 25
enter no 4 : 35
enter no 5 : -2
max no : 150
min no : -2
dbda@iacsd ~/assignment4>
```
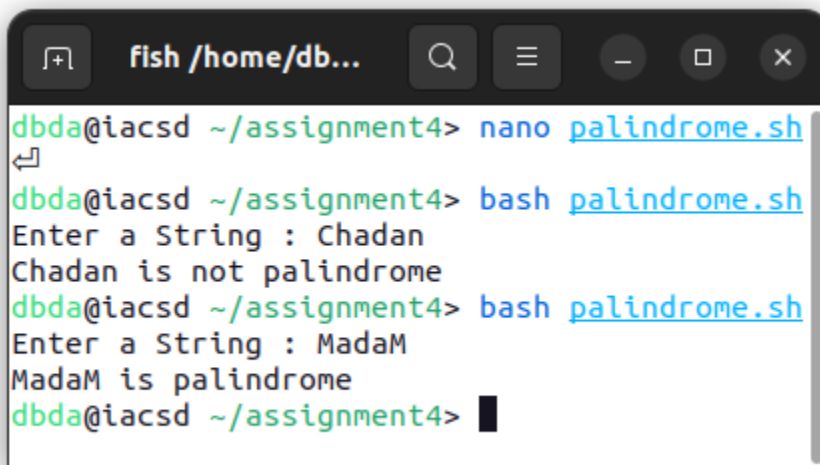
5) Write a script to find out String is palindrome or not.

```
GNU nano 6.2        palindrome.sh
#! /bin/bash
read -p "Enter a String : " name

if  [[ $name == "$(rev <<< "$name")" ]]
then
        echo "$name is palindrome"
else
        echo "$name is not palindrome"
fi
```
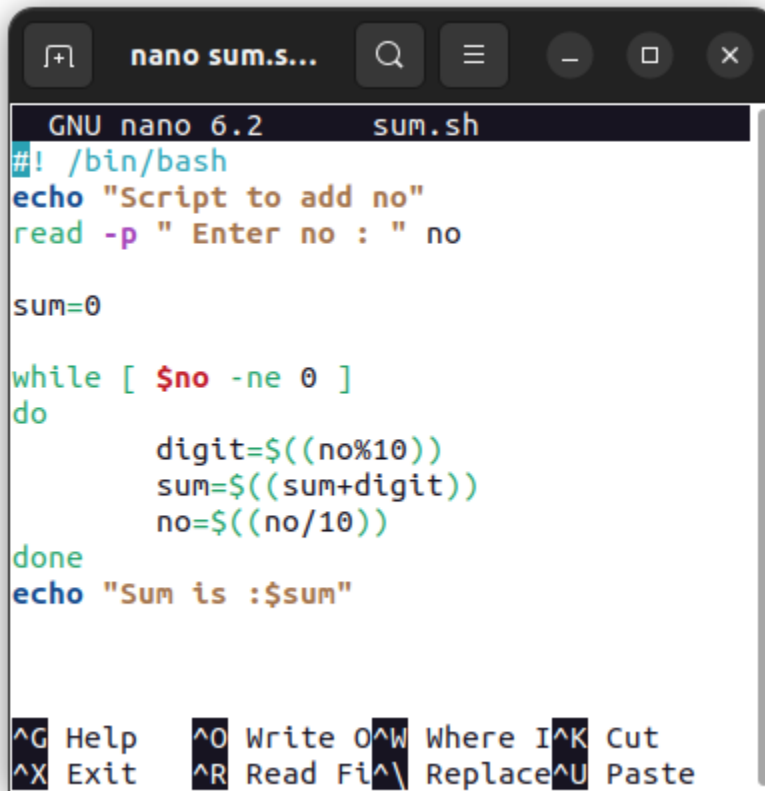
```
dbda@iacsd ~/assignment4> nano palindrome.sh
⏎
dbda@iacsd ~/assignment4> bash palindrome.sh
Enter a String : Chadan
Chadan is not palindrome
dbda@iacsd ~/assignment4> bash palindrome.sh
Enter a String : MadaM
MadaM is palindrome
dbda@iacsd ~/assignment4>
```

6) Write a shell script to print given number's sum of all digits (eg. If number is 123, then it's sum of all digits will be 1+2+3=6)
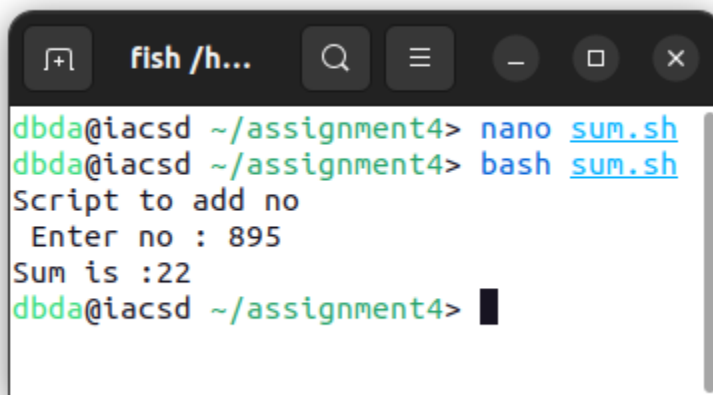
```bash
#! /bin/bash
echo "Script to add no"
read -p " Enter no : " no

sum=0

while [ $no -ne 0 ]
do
        digit=$((no%10))
        sum=$((sum+digit))
        no=$((no/10))
done
echo "Sum is :$sum"
```

```
dbda@iacsd ~/assignment4> nano sum.sh
dbda@iacsd ~/assignment4> bash sum.sh
Script to add no
 Enter no : 895
Sum is :22
dbda@iacsd ~/assignment4>
```

7) Create a script to Create user , Delete user , Create group , delete Group using case


```
GNU nano 6.2                                     user_creation.sh *
#! /bin/bash
echo -e "Script to create delete user and group \n\tSelect option \n\t1.Create User\n\t2.Delete user\n\t3.C>
read option
case $option in
        1)
        read -p "Enter name to create user : " us
        sudo adduser $us
        ;;
        2)
        read -p "Enter name to create user : " us
        sudo deluser $us
        ;;
        3)
        read -p "Enter name to create user : " us
        sudo addgroup $us
        ;;
        4)
        read -p "Enter name to create user : " us
        sudo delgroup $us
        ;;
esac
```

^G Help   ^O Write Out   ^W Where Is   ^K Cut   ^T Execute   ^C Location   M-U Undo
^X Exit   ^R Read File   ^\ Replace   ^U Paste   ^J Justify   ^/ Go To Line M-E Redo

```
fish /home/dbda/assignment4

fish /home/dbda/assign...          fish /home/dbda/assign...

dbda@iacsd ~/assignment4> nano user_creation.sh
dbda@iacsd ~/assignment4> bash user_creation.sh
Script to create delete user and group
        Select option
        1.Create User
        2.Delete user
        3.Create Group
        4.Delete Grpup
1
Enter name to create user : tinku
[sudo] password for dbda:
Adding user `tinku' ...
Adding new group `tinku' (1001) ...
Adding new user `tinku' (1001) with group `tinku' ...
Creating home directory `/home/tinku' ...
Copying files from `/etc/skel' ...
New password:
BAD PASSWORD: The password is a palindrome
Retype new password:
passwd: password updated successfully
Changing the user information for tinku
Enter the new value, or press ENTER for the default
        Full Name []: Tinku
        Room Number []:
        Work Phone []:
        Home Phone []:
        Other []:
Is the information correct? [Y/n] y
dbda@iacsd ~/assignment4> █
```

```
dbda@iacsd ~/assignment4> nano user_creation.sh
dbda@iacsd ~/assignment4> bash user_creation.sh
Script to create delete user and group
        Select option
        1.Create User
        2.Delete user
        3.Create Group
        4.Delete Grpup
2
Enter name to delete user : tinku
Removing user `tinku' ...
Warning: group `tinku' has no more members.
Done.
dbda@iacsd ~/assignment4> bash user_creation.sh
Script to create delete user and group
        Select option
        1.Create User
        2.Delete user
        3.Create Group
        4.Delete Grpup
3
Enter name to create group : mango
Adding group `mango' (GID 1001) ...
Done.
dbda@iacsd ~/assignment4> bash user_creation.sh
Script to create delete user and group
        Select option
        1.Create User
        2.Delete user
        3.Create Group
        4.Delete Grpup
4
Enter name to delete group : mango
Removing group `mango' ...
Done.
dbda@iacsd ~/assignment4> █
```