```
  GNU nano 6.2                    abc.sh *
whomami
pwd
who
ls -l
```

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

dbda@IACSD: ~

```
dbda@IACSD:~$ nano abc.sh
dbda@IACSD:~$ chmod 777 abc.sh
dbda@IACSD:~$ ./abc.sh
./abc.sh: line 1: whomami: command not found
/home/dbda
dbda     tty2          2024-03-15 14:20 (tty2)
total 60
drwxrwxr-x 2 dbda dbda 4096 Mar 14 16:45 abc
drwxrwxr-x 4 dbda dbda 4096 Mar 15 14:37 abcd
-rwxrwxrwx 1 dbda dbda   23 Mar 15 16:29 abc.sh
drwxr-xr-x 2 dbda dbda 4096 Mar 12 17:55 Desktop
drwxr-xr-x 2 dbda dbda 4096 Mar  6 19:43 Documents
drwxr-xr-x 2 dbda dbda 4096 Mar  6 19:43 Downloads
drwxr-xr-x 3 root root 4096 Mar 14 16:22 LINK
drwxrwxr-x 2 dbda dbda 4096 Mar 15 14:49 moviess
drwxr-xr-x 2 dbda dbda 4096 Mar  6 19:43 Music
drwxr-xr-x 2 dbda dbda 4096 Mar  6 19:43 Pictures
drwxr-xr-x 2 dbda dbda 4096 Mar  6 19:43 Public
drwxrwxr-x 2 dbda dbda 4096 Mar 12 17:55 script
drwx------ 4 dbda dbda 4096 Mar  9 15:01 snap
drwxr-xr-x 2 dbda dbda 4096 Mar  6 19:43 Templates
drwxr-xr-x 2 dbda dbda 4096 Mar  6 19:43 Videos
dbda@IACSD:~$
```

```
  GNU nano 6.2                                    script.sh
echo "for finding press 1"
echo "for adding press 2"
echo "for deletion press 3"

read -p "Enter the operation you want to do : " a

case $a in
        1)

                read -p "enter what you want to find : " find
                cat database.txt | grep "$find"

        ;;
        2)

                read -p "Enter the details you want to add in format (Rollno. : Name : sem : marks1 : marks2 : marks3) : " details
                echo $details >> database.txt
                cat database.txt

        ;;
        3)

                cat database.txt
                read -p "Enter the entry which you want to delete :" line
                cp database.txt test.txt
                sed "/^$line /d" test.txt > database.txt
                echo "Deleted Successfully"

        ;;
        *)

                echo "Entry not found"

esac
```

```
dbda@IACSD:~$ nano database.txt
dbda@IACSD:~$ bash script.sh
for finding press 1
for adding press 2
for deletion press 3
Enter the operation you want to do : 3
Roll no : Name : sem : m1 : m2 : m3
1 : Gbbay : 1 : 60 : 70 : 10
2 : thakur : 1 : 89 : 49 : 52
4 : jhon : 1 : 66 : 99 : 80
5 : baklawa : 1 : 78 : 54 : 95
10 : babu : 2 : 30 : 50 :80
Enter the entry which you want to delete :10
Deleted Successfully
dbda@IACSD:~$ cat database.txt
Roll no : Name : sem : m1 : m2 : m3
1 : Gbbay : 1 : 60 : 70 : 10
2 : thakur : 1 : 89 : 49 : 52
4 : jhon : 1 : 66 : 99 : 80
5 : baklawa : 1 : 78 : 54 : 95
dbda@IACSD:~$
```

```bash
echo "for finding press 1"
echo "for adding press 2"
echo "for deletion press 3"

read -p "Enter the operation you want to do : " a

case $a in
        1)
                read -p "enter what you want to find : " find
                cat database.txt | grep "$find"
        ;;
        2)
                read -p "Enter the details you want to add : " details
                echo $details >> database.txt
                cat database.txt
        ;;
        3)
                cat database.txt
                read -p "Enter the entry which you want to delete :" line
                sed "/^$line /d" database.txt > test.txt
esac
```
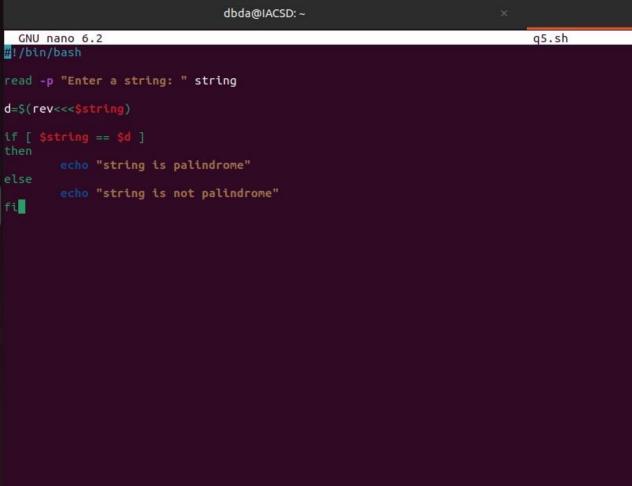
```bash
zero=0
pos=0
neg=0

for i in {1..10}
do
        read -p "enter 10 numbers " num
        if [ $num -eq 0 ]
        then
                ((zero++))
        elif [ $num -lt 0 ]
        then
                ((neg++))
        elif [ $num -gt 0 ]
        then
                ((pos++))
        fi
done

echo "you have enter $zero zeroes, $pos positive nos & $neg negative nos"
```

```
dbda@IACSD:~$ bash q3.sh
enter 10 numbers 2
enter 10 numbers 0
enter 10 numbers -8
enter 10 numbers -9
enter 10 numbers 0
enter 10 numbers -6
enter 10 numbers 6
enter 10 numbers 0
enter 10 numbers -7
enter 10 numbers 6
you have enter 3 zeroes, 3 positive nos & 4 negative nos
dbda@IACSD:~$
```

```
array+=()

for i in {1..5}
do
        read -p "Enter 5 numbers" num
        array+=($num)
done
ary=(`printf '%s\n' "${array[@]}" | sort -n`)
echo "Largest value you entered ${ary[4]}"
echo "Lowest value you entered ${ary[0]}"
```

```
dbda@IACSD:~$ bash q4ag.sh
Enter 5 numbers-1
Enter 5 numbers8
Enter 5 numbers0
Enter 5 numbers76
Enter 5 numbers-53
Largest value you entered 76
Lowest value you entered -53
dbda@IACSD:~$ bash q4ag.sh
Enter 5 numbers8
Enter 5 numbers7
Enter 5 numbers4
Enter 5 numbers2
Enter 5 numbers7
Largest value you entered 8
Lowest value you entered 2
dbda@IACSD:~$ bash q4ag.sh
Enter 5 numbers-4
Enter 5 numbers-8
Enter 5 numbers-9
Enter 5 numbers-3
Enter 5 numbers-5
Largest value you entered -3
Lowest value you entered -9
dbda@IACSD:~$
```

GNU nano 6.2   q5.sh

```bash
#!/bin/bash

read -p "Enter a string: " string

d=$(rev<<<$string)

if [ $string == $d ]
then
        echo "string is palindrome"
else
        echo "string is not palindrome"
fi
```

```
dbda@IACSD:~$ bash q5.sh
Enter a string: hello
string is not palindrome
dbda@IACSD:~$ bash q5.sh
Enter a string: elle
string is palindrome
dbda@IACSD:~$
```

```bash
echo -n "Enter a number"
read n

while [ $n -gt 0 ]
do
        mod=$((n % 10))
        sum=$((sum + mod))
        n=$((n / 10))
done

echo "sum is $sum"
```

```
dbda@IACSD:~$ bash q6.sh
Enter a number234
sum is 9
dbda@IACSD:~$
```

```
Enter 2 to delete user
Enter 3 to create group
Enter 4 to delete group
1
Enter the name of the user to adduser
cups-pk-helper:x:115:122:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
sssd:x:118:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
fwupd-refresh:x:120:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
user:x:1008:1008::/home/user:/bin/sh
dbda@IACSD:~$ bash q7.sh
Enter 1 to create user
Enter 2 to delete user
Enter 3 to create group
Enter 4 to delete group
2
Enter the name of the user to deleteuser
Removing user `user' ...
Warning: group `user' has no more members.
Done.
cups-pk-helper:x:115:122:user for cups-pk-helper service,,,:/home/cups-pk-helper:/usr/sbin/nologin
sssd:x:118:125:SSSD system user,,,:/var/lib/sss:/usr/sbin/nologin
fwupd-refresh:x:120:126:fwupd-refresh user,,,:/run/systemd:/usr/sbin/nologin
hplip:x:127:7:HPLIP system user,,,:/run/hplip:/bin/false
```

```
echo "Enter 1 to create user"
echo "Enter 2 to delete user"
echo "Enter 3 to create group"
echo "Enter 4 to delete group"


read n

case $n in
        1)
                echo -n "Enter the name of the user to add"
                read m
                sudo useradd $m
                cat /etc/passwd | grep "$m"
        ;;
        2)
                echo -n "Enter the name of the user to delete"
                read u
                sudo deluser $u
                cat /etc/passwd | grep "$u"
        ;;
        3)
                echo -n "Enter the name of the group to add"
                read g
                sudo addgroup $g
                cat /etc/group | grep "$g"
        ;;
        4)
                echo -n "Enter the name of the group to delete"
                read d
                sudo delgroup $d
                cat /etc/group | grep "$d"
esac
```

```
dbda@IACSD:~$ bash q7.sh
Enter 1 to create user
Enter 2 to delete user
Enter 3 to create group
Enter 4 to delete group
3
Enter the name of the group to addusersssss
Adding group `usersssss' (GID 1008) ...
Done.
usersssss:x:1008:
dbda@IACSD:~$ bash q7.sh
Enter 1 to create user
Enter 2 to delete user
Enter 3 to create group
Enter 4 to delete group
4
Enter the name of the group to deleteusersssss
Removing group `usersssss' ...
Done.
dbda@IACSD:~$
```