

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

```
dbda@dbda-VirtualBox:~$ nano Q1.sh
dbda@dbda-VirtualBox:~$ cat Q1.sh
#!/bin/bash
echo -n "the current user :"

whoami
echo -n "present working directory"

pwd

echo -n " the current terminal "

who

echo -n " list of files and directories "

ls -l
```

```
dbda@dbda-VirtualBox:~$ bash Q1.sh
the current user :dbda
present working directory/home/dbda
the current terminal dbda      tty2          2024-03-15 14:12 (tty2)
list of files and directories total 40
drwxr-xr-x 2 dbda dbda 4096 Mar  7 10:39 Desktop
drwxr-xr-x 2 dbda dbda 4096 Mar  7 10:39 Documents
drwxr-xr-x 2 dbda dbda 4096 Mar  7 10:39 Downloads
drwxr-xr-x 2 dbda dbda 4096 Mar  7 10:39 Music
drwxr-xr-x 2 dbda dbda 4096 Mar  7 10:39 Pictures
drwxr-xr-x 2 dbda dbda 4096 Mar  7 10:39 Public
-rw-rw-r-- 1 dbda dbda  181 Mar 15 16:41 Q1.sh
drwx----- 5 dbda dbda 4096 Mar 15 14:25 snap
drwxr-xr-x 2 dbda dbda 4096 Mar  7 10:39 Templates
drwxr-xr-x 2 dbda dbda 4096 Mar  7 10:39 Videos
dbda@dbda-VirtualBox:~$
```

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.

```
dbda@dbda-VirtualBox:~$ cat Q2.sh
read -p " enter the number of entries " num
a=0
for (( a=0; a<$num ; a++ ))
do
    read -p " enter roll no. :: " roll
    read -p " enter name :: " nam
    read -p " enter semester :: " sem
    read -p " enter marks in physics :: " ph
    read -p " enter marks in chemistey :: " chem
    read -p " enter marks in maths:: " mh
    echo -e " \n enter new student details \n"

    echo -e " $roll $nam $sem mark in ph :: $ph mark in chem :: $chem mark in maths :: $mh \n" >> data.txt
done
cat data.txt
```

```
case $n1 in
    1)
        ./Q2.sh
        ;;
    2) read -p " enter roll number which you have to delet " n3

        grep -v $n3 data.txt > bin.txt && mv bin.txt data.txt
        cat data.txt
        ;;
    3)
        read -p " Enter the roll no you want to search " n2
        cat data.txt | grep $n2
        ;;
    *)
        echo "data not found "
        ;;
esac
```

3) Write a Linux shell script to accept 10 number and tell how many are +tive, -tive and zero.

```
dbda@dbda-VirtualBox:~$ cat Q3.sh
positive=0
negative=0
zero=0
echo " enter 10 numbers"

for (( a=0;a<10;a++ ))
do
    read num
    if [ $num -gt 0 ]
    then
        ((positive++))
    elif [ $num -lt 0 ]
    then
        ((negative++))
    else
        ((zero++))
    fi
done
echo " poditive no.s= $positive "
echo " negative no.s= $negative "
echo " zeros = $zero "

dbda@dbda-VirtualBox:~$ bash Q3.sh
enter 10 numbers
1
3
-6
-5
0
0
-9
2
3
5
poditive no.s= 5
negative no.s= 3
zeros = 2
dbda@dbda-VirtualBox:~$
```

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

```

max=0
min=0
find_max_min()
{
for num in $@;
do
if [[ $num -gt $max ]];
then
max=$num
fi
if [[ $num -lt $min ]]
then
min=$num
fi
done
}
echo " enter five number : "
read num1 num2 num3 num4 num5
find_max_min $num1 $num2 $num3 $num4 $num5

echo "Maximum value : $max "
echo " Minimum value : $min "

```

5) Write a script to find out String is palindrome or not.

```

dbda@dbda-VirtualBox:~$ cat Q5.sh
echo " Enter the number "
read num

reverse=$(echo $num | rev )
if [ $num == $reverse ]
then
echo " $num is palindrome number "
else
echo " $num is not palindrome number "
fi

dbda@dbda-VirtualBox:~$ bash Q5.sh
Enter the number
121
121 is palindrome number
dbda@dbda-VirtualBox:~$ bash Q5.sh
Enter the number
123
123 is not palindrome number
dbda@dbda-VirtualBox:~$

```

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 $1+2+3=6$)

```
dbda@dbda-VirtualBox:~$ cat Q6.sh
read -p "enter the number " num
mod=0
sum=0
add=0

while [ $num -gt 0 ]
do
mod=`expr $num % 10 `
sum=`expr $sum + $mod `
num=`expr $num / 10 `

add=`expr $add + $mod `
done
echo "the addition of the numbers $add "
dbda@dbda-VirtualBox:~$ bash Q6.sh
enter the number 123
the addition of the numbers 6
dbda@dbda-VirtualBox:~$
```

7) Create a script to

Create user , Delete user , Create group , delete Group using case

dbda@dbda-VirtualBox:~\$ cat Q7.sh

```
read -p "for adding user=1 Delete User=2 create group=3 delete group="
```

```
case $n in
```

```
1)
```

```
read -p "Enter username:: " a
```

```
sudo adduser $a
```

```
;;
```

```
2)
```

```
read -p "Enter username ::" b
```

```
sudo userdel -f $b
```

```
;;
```

```
3)
```

```
read -p " Enter group name :: " c
```

```
sudo addgroup $c
```

```
;;
```

```
4)
```

```
read -p " Enter group name :: " d
```

```
sudo groupdel $d
```

```
;;
```

```
*)
```

```
Exit
```

```
;;
```

```
esac
```