

**Name :** Dhruva Rakesh B  
243514

**Roll Number :**

### **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

```
dbda@iacsd:~/project$ cat 1.sh
#!/bin/bash
whoami
pwd
tty
ls -al | wc -l
dbda@iacsd:~/project$ bash 1.sh
dbda
/home/dbda/project
/dev/pts/1
11
```

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@iacsd:~/project$ cat 2.sh
#!/bin/bash
echo "PRESS 1 FOR ADDING"
echo "PRESS 2 FOR DELETION"
echo "PRESS 3 FOR FINDING"
echo "PRESS 4 FOR EXIT"

read num
case $num in
    1)
        echo "Enter the entries to be added"
        read -p "ROLL NO:- " roll_no
        read -p "NAME:- " name
        read -p "SEMESTER:- " sem
        read -p "SUBJECT1:- " s1
        read -p "SUBJECT2:- " s2
        read -p "SUBJECT3:- " s3
        echo "$roll_no $name $sem $s1 $s2 $s3" >> data.txt
        ;;
    2)
        read -p "ROLL NO:- " roll_no
        sed -i "/$roll_no/d" data.txt
        echo "$st1"
        ;;
    3)
        read -p "ROLL NO:- " roll_no
        echo "ROLL NO, NAME SEMESTER, SUBJECT1, SUBJECT2, SUBJECT3"
        cat data.txt | grep "$roll_no"
        ;;
esac

```

```

dbda@iacsd:~/project$ bash 2.sh
PRESS 1 FOR ADDING
PRESS 2 FOR DELETION
PRESS 3 FOR FINDING
PRESS 4 FOR EXIT
1
Enter the entries to be added
ROLL NO:- 104
NAME:- salman
SEMESTER:- 4
SUBJECT1:- 30
SUBJECT2:- 25
SUBJECT3:- 50

```

```
dbda@iacsd:~/project$ cat data.txt
201,d,2,2,2,3
301,df,34,54,45,45
102 2354 G F GH HG
103 DSFG 23 VB G GF
104 salman 4 30 25 50
```

```
dbda@iacsd:~/project$ bash 2.sh
PRESS 1 FOR ADDING
PRESS 2 FOR DELETION
PRESS 3 FOR FINDING
PRESS 4 FOR EXIT
2
ROLL NO:- 104
```

```
dbda@iacsd:~/project$ cat data.txt
201,d,2,2,2,3
301,df,34,54,45,45
102 2354 G F GH HG
103 DSFG 23 VB G GF
```

```
dbda@iacsd:~/project$ bash 2.sh
PRESS 1 FOR ADDING
PRESS 2 FOR DELETION
PRESS 3 FOR FINDING
PRESS 4 FOR EXIT
3
ROLL NO:- 301
ROLL NO, NAME SEMESTER, SUBJECT1, SUBJECT2, SUBJECT3
301,df,34,54,45,45
```

```
dbda@iacsd:~/project$ bash 2.sh
PRESS 1 FOR ADDING
PRESS 2 FOR DELETION
PRESS 3 FOR FINDING
PRESS 4 FOR EXIT
4
dbda@iacsd:~/project$
```

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

```
dbda@iacsd:~/project$ cat 3.sh
#!/bin/bash

echo "Enter 10 numbers"
count_p=0
count_n=0
count_z=0
for((i=0;i<10;i++))
do
    read num
    if [ $num -gt 0 ]
    then
        count_p=$((count_p+1))
    elif [ $num -lt 0 ]
    then
        count_n=$((count_n+1))
    else
        count_z=$((count_z+1))
    fi
done
echo -e "POSITIVE NUMBER COUNT: $count_p\nNEGATIVE NUMBER COUNT $count_n\nZERO NUMBER COUNT $count_z"
```

```
dbda@iacsd:~/project$ bash 3.sh
Enter 10 numbers
3
5
-2
0
-7
0
-4
2
1
0
POSITIVE NUMBER COUNT: 4
NEGATIVE NUMBER COUNT 3
ZERO NUMBER COUNT 3
```

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

```
dbda@iacsd:~/project$ cat 4.sh
#!/bin/bash
read num
temp_g=$num
temp_s=$num
for((i=0;i<4;i++))
do
    read num1
    if [ $num1 -gt $temp_g ]
    then
        temp_g=$num1
    elif [ $num1 -lt $temp_s ]
    then
        temp_s=$num1
    fi
done
echo -e "LARGEST NO:- $temp_g \nSMALLEST NO:- $temp_s"

dbda@iacsd:~/project$ bash 4.sh
30
8
43
72
25
LARGEST NO:- 72
SMALLEST NO:- 8
```

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

```
dbda@iacsd:~/project$ cat 5.sh
#!/bin/bash

read -p "ENTER THE STRING" str

if [[ $str == "$(rev <<< "$str")" ]]
then
    echo "Palindrome"
else
    echo "Not palindrome"
fi
```

```
dbda@iacsd:~/project$ bash 5.sh
ENTER THE STRING: banab
Palindrome
dbda@iacsd:~/project$ bash 5.sh
ENTER THE STRING: cars
Not palindrome
```

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@iacsd:~/project$ cat 6.sh
#!/bin/bash
read -p "input the number:- " num
num1=0

while [ $num -gt 0 ]
do
    mod=$((num%10))
    num1=$((mod+num1))
    num=$((num/10))
done
echo "$num1"
```

```
dbda@iacsd:~/project$ bash 6.sh
input the number:- 345
12
```

7) Create a script to

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

```
dbda@iacsd:~/project$ cat 7.sh
#!/bin/bash
echo "PRESS 1 FOR CREATE USER"
echo "PRESS 2 FOR DELETE USER"
echo "PRESS 3 FOR CREATE GROUP"
echo "PRESS 4 FOR DELETE GROUP"

read num
case $num in
    1)
        read -p "ENTER THE USERNAME" username
        sudo useradd $username
        ;;
    2)
        read -p "ENTER THE USERNAME" username1
        sudo deluser $username1
        ;;
    3)
        read -p "ENTER THE GROUP NAME" groupname
        sudo addgroup $groupname
        ;;
    4)
        read -p "ENTER THE GROUP NAME" groupname1
        sudo delgroup $groupname1
esac
```

```
dbda@iacsd:~/project$ bash 7.sh
PRESS 1 FOR CREATE USER
PRESS 2 FOR DELETE USER
PRESS 3 FOR CREATE GROUP
PRESS 4 FOR DELETE GROUP
1
ENTER THE USERNAME salman
```

```
dbda@iacsd:~/project$ bash 7.sh
PRESS 1 FOR CREATE USER
PRESS 2 FOR DELETE USER
PRESS 3 FOR CREATE GROUP
PRESS 4 FOR DELETE GROUP
2
ENTER THE USERNAME salman
Removing user `salman' ...
Warning: group `salman' has no more members.
Done.
```

```
dbda@iacsd:~/project$ bash 7.sh
PRESS 1 FOR CREATE USER
PRESS 2 FOR DELETE USER
PRESS 3 FOR CREATE GROUP
PRESS 4 FOR DELETE GROUP
3
ENTER THE GROUP NAME dac
Adding group `dac' (GID 1004) ...
Done.
```

```
dbda@iacsd:~/project$ bash 7.sh
PRESS 1 FOR CREATE USER
PRESS 2 FOR DELETE USER
PRESS 3 FOR CREATE GROUP
PRESS 4 FOR DELETE GROUP
4
ENTER THE GROUP NAME dac
Removing group `dac' ...
Done.
```