

Name – Harsh Nipane

Question 1

```
dbda@iacsd:~$ whoami
dbda
dbda@iacsd:~$ pwd
/home/dbda
dbda@iacsd:~$ who
dbda      tty2          2024-03-15 14:16 (tty2)
dbda@iacsd:~$ ls -l
total 56
drwxr-xr-x 2 dbda dbda 4096 Mar  7 15:43 Desktop
drwxr-xr-x 2 dbda dbda 4096 Mar  7 15:43 Documents
drwxr-xr-x 2 dbda dbda 4096 Mar  7 15:43 Downloads
drwxrwxr-x 3 dbda dbda 4096 Mar 14 22:29 ftp
-rw-rw-r-- 1 dbda dbda  10 Mar 15 15:47 hello.sh
drwxrwxr-x 2 dbda dbda 4096 Mar 14 22:29 LINK
drwxrwxr-x 3 dbda dbda 4096 Mar 15 14:58 movies
drwxr-xr-x 2 dbda dbda 4096 Mar  7 15:43 Music
-rw-rw-r-- 1 dbda dbda  32 Mar 14 22:30 one.txt
drwxr-xr-x 2 dbda dbda 4096 Mar  7 15:43 Pictures
drwxr-xr-x 2 dbda dbda 4096 Mar  7 15:43 Public
drwx----- 4 dbda dbda 4096 Mar 14 22:31 snap
drwxr-xr-x 2 dbda dbda 4096 Mar  7 15:43 Templates
-rw-rw-r-- 1 dbda dbda   0 Mar 14 22:29 three.txt
-rw-rw-r-- 1 dbda dbda   0 Mar 14 22:29 two.txt
drwxr-xr-x 2 dbda dbda 4096 Mar  7 15:43 Videos
dbda@iacsd:~$ █
```

Question 2

```
dbda@iacsd:~$ nano data.sh
dbda@iacsd:~$ bash data.sh
1- to adding record
2- deleteing record
3- searching record
enter choice1
enter the data to add format- rollno:name:sem:sub1:sub2:sub3
5:rahul:8:78:90:45
```

```
1:sam:2:90:80:76
2:ram:2:80:79:90
3:suraj:3:80:85:76
5:rahul:8:78:90:45
```

```
dbda@iacsd:~$ bash data.sh
1- to adding record
2- deleteing record
3- searching record
enter choice3
rollno:name:sem:maths:cpp:java
1:sam:2:90:80:76
2:ram:2:80:79:90
3:suraj:3:80:85:76
5:rahul:8:78:90:45
enter name to filter
sam
1:sam:2:90:80:76
```

Question 3

```
dbda@iacsd:~$ nano count.sh
dbda@iacsd:~$ ./count.sh
Enter 1 number 3
Enter 2 number -2
Enter 3 number 6
Enter 4 number 4
Enter 5 number 8
Enter 6 number -9
Enter 7 number 1
Enter 8 number 0
Enter 9 number 2
Enter 10 number 0
Positive numbers are 6
Negative numbers are 2
number of zeros are 2
```

```
#!/bin/bash
```

```
pos=0
neg=0
zero=0
for((i=1;i<=10;i++))
do
    echo -n "Enter $i number "
    read a
    if [ $a -gt 0 ]
    then
        pos=`expr $pos + 1`
    elif [ $a -lt 0 ]
    then
        neg=`expr $neg + 1`
    else
        zero=`expr $zero + 1`
    fi
done
echo "Positive numbers are $pos"
echo "Negative numbers are $neg"
echo "number of zeros are $zero"
```

Question 4

```
dbda@iacsd:~$ nano maxmin.sh
dbda@iacsd:~$ ./maxmin.sh
enter 1 number5
enter 2 number2
enter 3 number1
enter 4 number9
enter 5 number7
maximum number is 9
minium number is 1
```

```
#!/bin/bash

max=0
for((i=1;i<6;i++))
do
    echo -n "enter $i number"
    read a
    if [ $max -lt $a ]
    then
        max=$a
        if [ $i -eq 1 ]
        then
            min=$a
        fi
    elif [ $min -gt $a ]
    then
        min=$a
    fi
done

echo "maximum number is $max"
echo "minium number is $min"
```

Question 5

```
dbda@iacsd:~$ nano palin.sh
dbda@iacsd:~$ ./palin.sh
enter name hsh
hsh is palindrome

#!/bin/bash

read -p "enter name " name
d=5
d=$(rev<<<$name)

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

Question 6

```
dbda@iacsd:~$ nano sum.sh
dbda@iacsd:~$ ./sum.sh
enter the number123
sum is 6
```

```
#!/bin/bash

echo -n "enter the number"
read n

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

echo "sum is $sum"
```

Question 7

```
#!/bin/bash
echo "1 - to create user"
echo "2 - to delete user"
echo "3 - to create group"
echo "4 - to delete group"
echo -n "enter your choice "
read ch
case $ch in
1)
    echo -n "enter name of user to add "
    read a
    sudo adduser $a
    cat /etc/passwd
;;
2)
    cat /etc/passwd
    echo -n "enter user to delete "
    read d
    sudo deluser $d
;;
3)
    echo -n "enter group name to add "
    read g
    sudo addgroup $g
    cat /etc/group
;;
4)
    cat /etc/group
    echo -n "enter group to delete"
    read b
    sudo delgroup $b
    cat /etc/group
    echo "$b group is deleted"
;;
esac
```

Activate
Go to Sett

```
dbda@iacsd:~$ nano user.sh
dbda@iacsd:~$ ./user.sh
1 - to create user
2 - to delete user
3 - to create group
4 - to delete group
enter your choice 1
enter name of user to add harsh
Adding user `harsh' ...
Adding new group `harsh' (1001) ...
Adding new user `harsh' (1001) with group `harsh' ...
```

```
sshd:x:130:65534::/run/sshd:/usr/sbin/nologin
harsh:x:1001:1001:,,,:/home/harsh:/bin/bash
dbda@iacsd:~$ ./user.sh
1 - to create user
2 - to delete user
3 - to create group
4 - to delete group
enter your choice 2
```

```
harsh:x:1001:1001:,,,:/home/harsh:/bin/bash
enter user to delete harsh
Removing user `harsh' ...
Warning: group `harsh' has no more members.
Done.
dbda@iacsd:~$ ./user.sh
1 - to create user
2 - to delete user
3 - to create group
4 - to delete group
enter your choice 3
enter group name to add suyog
Adding group `suyog' (GID 1001) ...
Done.
```

```
suyog:x:1001:
dbda@iacsd:~$ ./user.sh
1 - to create user
2 - to delete user
3 - to create group
4 - to delete group
enter your choice 4
```

```
sambashare:x:136:dbda
ftp:x:137:
suyog group is deleted
```