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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

```
#! bin/hash
whoami
pwd
uname -a
ls -l
```

```
dbda@iacsd:~$ nano a.sh
dbda@iacsd:~$ bash a.sh
dbda
/home/dbda
Linux iacsd 6.5.0-21-generic #21~22.04.1-Ubuntu SMP PREEMPT_DYNAMIC Fri Feb  9 1
3:32:52 UTC 2 x86_64 x86_64 x86_64 GNU/Linux
total 44
-rw-rw-r-- 1 dbda dbda   38 Mar 15 16:29 a.sh
drwxr-xr-x 4 dbda dbda 4096 Mar  7 15:35 Desktop
drwxr-xr-x 2 dbda dbda 4096 Mar  7 15:25 Documents
drwxr-xr-x 2 dbda dbda 4096 Mar  7 15:25 Downloads
drwxr-xr-x 2 dbda dbda 4096 Mar  7 15:25 Music
drwxr-xr-x 2 dbda dbda 4096 Mar  7 15:25 Pictures
drwxr-xr-x 2 dbda dbda 4096 Mar  7 15:25 Public
-rw-rw-r-- 1 dbda dbda   72 Mar  7 18:36 river.txt
drwx------ 3 dbda dbda 4096 Mar  7 15:25 snap
drwxr-xr-x 2 dbda dbda 4096 Mar  7 15:25 Templates
drwxr-xr-x 2 dbda dbda 4096 Mar  7 15:25 Videos
dbda@iacsd:~$ nano a.sh
dbda@iacsd:~$ 
```

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
#! bin/bash
echo "1 add"
echo "2 delete"
echo "3 search"
while [ 1 ]

    Ubuntu Software  your choice: " ch
case $ch in
1)
read -p "enter your rollno | name | marks" data
echo $data >> a2.txt
cat a2.txt
;;
2)
read -p "delete record" delete
sed -i  "/$delete/d" a2.txt
cat a2.txt
;;
3)
read -p "search record" search
cat a2.txt | grep "$search"
;;
4)
exit 0
;;
*)
echo "error"
;;
esac
done
```

```
dbda@iacsd:~$ bash menu.sh
1 add
2 delete
3 search
enter your choice: 1
enter your rollno | name | marks 3 anuja 90
1 rutu 50
2 sridevi 80
3 anuja 90
enter your choice: 2
delete record1
2 sridevi 80
3 anuja 90
enter your choice: 3
search record3
3 anuja 90
enter your choice: 4
dbda@iacsd:~$ nano a2.txt
```

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

```bash
#! bin/hash
p=0
ne=0

for (( a=1 ; a<=10 ; a++ ))
do
read -p "enter number $a : " b
if [ $b -lt 0 ]
then
p=`expr $p + 1`
elif [ $b -gt 0 ]
then
n=`expr $n + 1`
else
echo "it's zero"
fi

done
echo " postive numbers are $p"
echo "negative numbers are $n"
```

```
dbda@iacsd:~$ bash b.sh
enter number 1 : 1
enter number 2 : 2
enter number 3 : 3
enter number 4 : 4
enter number 5 : 5
enter number 6 : 6
enter number 7 : 7
enter number 8 : -1
enter number 9 : 10
enter number 10 : -2
 postive numbers are 2
negative numbers are 8
```

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

```bash
#! bin/bash
min=9999
max=0
echo  "enter 5 numbers: "
for(( a=1 ; a<=5 ; a++ ))
do
read -p "enter num $a " b
if [ $min -gt $b ]
then
min=$b
fi
if [ $max -lt $b ]
then
max=$b
fi
done
echo "maxm : $max"
echo "minm : $min"
```

```
dbda@iacsd:~$ bash d.sh
enter 5 numbers:
enter num 1 1
enter num 2 2
enter num 3 3
enter num 4 4
enter num 5 5
maxm : 5
minm : 1
```

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

```bash
#! bin/bash
echo "enter string"
read str
echo $str>tmp
rvs="$(rev tmp)"
echo $rvs
if [ $rvs == $str ]
then
echo "palindrome"
else
echo "not a palindrome"
fi
```

```
dbda@iacsd:~$ bash 8.sh
enter string
rutu
utur
not a palindrome
dbda@iacsd:~$ bash 8.sh
enter string
^[[A
A[
ot a palindrome
dbda@iacsd:~$ nano 8.sh
dbda@iacsd:~$ bash 8.sh
enter string
pop
pop
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)

```bash
\#! bin/bash
s=0
read -p "enter number " n
echo $n
while [ $n -gt 0 ]
do
r=$((n%10))
s=$((s+r))
n=$((n/10))
done
echo "sum: $s"
```

```
dbda@iacsd:~$ bash 9.sh
enter number 123
123
sum: 6
```

7) Create a script to

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

```
dbda@iacsd:~$ bash 10.sh
menu
1 Create User
2 Delete User
3 Create Group
4 Delete Group
enter choice1
enter user namerutu
Adding user `rutu' ...
Adding new group `rutu' (1001) ...
Adding new user `rutu' (1001) with group `rutu' ...
Creating home directory `/home/rutu' ...
Copying files from `/etc/skel' ...
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: password updated successfully
Changing the user information for rutu
Enter the new value, or press ENTER for the default
        Full Name []:
        Room Number []:
        Work Phone []:
        Home Phone []:
        Other []:
Is the information correct? [Y/n] y
menu
1 Create User
2 Delete User
3 Create Group
4 Delete Group
```

```
enter choice2
enter user name to deleterutu
Removing user `rutu' ...
Warning: group `rutu' has no more members.
Done.
menu
1 Create User
2 Delete User
3 Create Group
4 Delete Group
```

```
enter group nameapple
Adding group `apple' (GID 1001) ...
Done.
menu
1 Create User
2 Delete User
3 Create Group
4 Delete Group
```

```
enter choice4
enter group name to deleteapple
Removing group `apple' ...
Done.
menu
1 Create User
```