Assignment No. 1

a. **Study of Basic Linux Commands: echo, ls, read, cat, touch, test, loops, arithmetic comparison, conditional loops, grep, sed etc.**

b. **Write a program to implement an address book with options given below: a) Create address book. b) View address book. c) Insert a record. d) Delete a record. e) Modify a record. f) Exit**

PROGRAM

```
opt=1
while [ "$opt" -lt 6 ]
do
        echo -e "Choose one of the Following\n1. Create a New Address Book\n2.
View Records\n3. Insert new Record\n4. Delete a Record\n5. Modify a Record\n6.
Exit"
        # echo -e, enables special features of echo to use \n \t \b etc.

        read opt
        case $opt in
        1)
                echo "Enter filename"
                read fileName
                if [ -e $fileName ] ; then # -e to check if file exists, if exits remove the
file
                        rm $fileName
                fi
                cont=1
                echo  "NAME\tNUMBER\t\tADDRESS\n=======\n" | cat >>
$fileName
                while [ "$cont" -gt 0 ]
                do
                        echo "\nEnter Name"
                        read name
                        echo "Enter Phone Number of $name"
                        read number
                        echo "Enter Address of $name"
                        read address
                        echo "$name\t$number\t\t$address" | cat >> $fileName
                        echo "Enter 0 to Stop, 1 to Enter next"
                        read cont
                done
                ;;
        2)

                cat $fileName
                ;;
```

3)
```
echo "\nEnter Name"
read name
echo "Enter Phone Number of $name"
read number
echo "Enter Address of $name"
read address
echo "$name\t$number\t\t$address" | cat >> $fileName
;;
```
4)
```
echo "Delete record\nEnter Name/Phone Number"
read pattern
temp="temp"
grep -v $pattern $fileName | cat >> $temp
rm $fileName
cat $temp | cat >> $fileName
rm $temp
;;
```
5)
```
echo "Modify record\nEnter Name/Phone Number"
read pattern
temp="temp"
grep -v $pattern $fileName | cat >> $temp
rm $fileName
cat $temp | cat >> $fileName
rm $temp
echo "Enter Name"
read name
echo "Enter Phone Number of $name"
read number
echo "Enter Address of $name"
read address
echo -e "$name\t$number\t$address" | cat >> $fileName
;;
```
```
esac
done
```

OUTPUT

#comp@comp-HP-EliteDesk-800-G2-SFF:~$ chmod u+x 1.sh

Access granted

#comp@comp-HP-EliteDesk-800-G2-SFF:~$ sh 1.sh
#-e Choose one of the Following
#1. Create a New Address Book
#2. View Records
#3. Insert new Record
#4. Delete a Record

#5. Modify a Record
#6. Exit
#1
#Enter filename
#assignment1b

Enter Name
Rucha
Enter Phone Number of Rucha
9623024926
Enter Address of Rucha
123 abcd, pune
Enter 0 to Stop, 1 to Enter next
0
-e Choose one of the Following
1. Create a New Address Book
2. View Records
3. Insert new Record
4. Delete a Record
5. Modify a Record
6. Exit
2
NAME   NUMBER   ADDRESS
==============================

Rucha   9623024926   123 abcd, pune

-e Choose one of the Following
1. Create a New Address Book
2. View Records
3. Insert new Record
4. Delete a Record
5. Modify a Record
6. Exit
3

Enter Name
neha
Enter Phone Number of neha
123456789
Enter Address of neha
aser,pune
-e Choose one of the Following
1. Create a New Address Book
2. View Records
3. Insert new Record
4. Delete a Record
5. Modify a Record

6. Exit
2
NAME   NUMBER   ADDRESS
==============================

Rucha   9623024926   123 abcd, pune
neha   123456789   aser,pune

-e Choose one of the Following
1. Create a New Address Book
2. View Records
3. Insert new Record
4. Delete a Record
5. Modify a Record
6. Exit
3

Enter Name
vijay
Enter Phone Number of vijay
987654321
Enter Address of vijay
qwert,pune
-e Choose one of the Following
1. Create a New Address Book
2. View Records
3. Insert new Record
4. Delete a Record
5. Modify a Record
6. Exit
3

Enter Name
ajay
Enter Phone Number of ajay
598741236
Enter Address of ajay
poiuyt,pune
-e Choose one of the Following
1. Create a New Address Book
2. View Records
3. Insert new Record
4. Delete a Record
5. Modify a Record
6. Exit
2
NAME   NUMBER   ADDRESS

```
================================
```

Rucha   9623024926   123 abcd, pune
neha   123456789   aser,pune
vijay 987654321   qwert,pune
ajay   598741236   poiuyt,pune

-e Choose one of the Following
1. Create a New Address Book
2. View Records
3. Insert new Record
4. Delete a Record
5. Modify a Record
6. Exit
4
Delete record
Enter Name/Phone Number
9623024926
-e Choose one of the Following
1. Create a New Address Book
2. View Records
3. Insert new Record
4. Delete a Record
5. Modify a Record
6. Exit
2
NAME   NUMBER   ADDRESS

```
================================
```

neha   123456789   aser,pune
vijay 987654321   qwert,pune
ajay   598741236   poiuyt,pune

-e Choose one of the Following
1. Create a New Address Book
2. View Records
3. Insert new Record
4. Delete a Record
5. Modify a Record
6. Exit
5
Modify record
Enter Name/Phone Number
ajay
Enter Name
ajay
Enter Phone Number of ajay

5698741236
Enter
Address of
ajay
xyz.pune
-e Choose one of the Following
1. Create a New Address Book
2. View Records
3. Insert new Record
4. Delete a Record
5. Modify a Record
6. Exit
2

NAME	NUMBER	ADDRESS
===============================		
neha	123456789	aser,pune
vijay	987654321	qwert,pune

-e ajay   5698741236xyz.pune
-e Choose one of the Following
1. Create a New Address Book
2. View Records
3. Insert new Record
4. Delete a Record
5. Modify a Record
6. Exit
6
#comp@comp-HP-EliteDesk-800-G2-SFF:~$