**1,14**

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

#! /bin/bash

it=0

a=1

while [[ $op -lt 7 ]]

do

        echo enter the option

        echo "1 for create"

        echo "2 for add"

        echo "3 for display"

        echo "4 for search"

        echo "5 for delete"

        echo "6 for modify"

        echo "7 for exit"

        echo "enter u r choice"

        read op

word="$op"

case "$word" in

"1")

        if [ "$op" == "1" ]

                then

                echo "Enter the name for the database"

                read db

                touch "$db"

        fi

;;

"2")

        if [ "$op" == "2" ]

                then

                echo "in which database u want to add records"

                read db

                echo "enter the no. of records"

                read n

        while [ $it -lt $n ]

        do

                echo "enter id:"

                read id1

                echo "enter name:"

                read nm

                pa1="^[A-Za-z]"

        while [[ ! $add =~ $pa ]]

        do

                echo "enter valid address:"

                read add

        done

        echo "enter address:"

        read add

        pa="^[A-Za-z0-9]"

        while [[ ! $add =~ $pa ]]

        do

                echo "enter valid address:"

                read add

        done

        #echo $add

        echo "enter phone no.:"

        read ph

        pat="^[0-9]{10}$"

        while [[ ! $ph =~ $pat ]]

        do

                echo "please enter phone number as XXXXXXXXXX:"

                read ph

        done

        #echo $ph

        echo "eter email:"

        read em

        patem="^[a-z0-9.\_%-+]+@[a-z]+\.[a-z]{2,4}$"

        while [[ ! $em =~ $patem ]]

        do

                echo "please enter valid email address"

                read em

        done

        #echo $em

        echo "$id1,$nm,$add,$ph,$em" >> "$db"

        it=`expr $it + 1`

        echo "$it record entered"

        done

        fi

;;

"3")

        if [ "$op" == "3" ]

                then

                echo "enter name of database from where data to be display:"

                read db

                cat $db

        fi

;;

"4")

        if [ "$op" == "4" ]

                then

                echo "enter name of database from where to search:"

                read db

                echo "enter email to be search:"

                read em1

                grep $em1 $db

                echo "record found"

                else

                echo "not found"

        fi

;;

"5")

        if [ "$op" == "5" ]

                then

                echo "enter name of database:"

                read db

                echo "enter id:"

                read id1

                echo "enter line no. u want to delete:"

                read linenumber

                for line in `grep -n "$id1" $db`

                do

                number=`echo "$line" | cut -c1`

                #echo $number

                if [ $number == $linenumber ]

                then

                lineRemove="${linenumber}d"

                sed -i -e "$lineRemove" $db

                echo "record removed"

                fi

                #echo

                cat $db

                done

        fi

;;

"6")

        if [ "$op" == "6" ]

                then

                echo "enter name of database:"

                read db

                echo "enter id:"

                read id1

                echo "enter line u want to modify:"

                read linenumber

                for line in `grep -n "$id1" "$db"`

                do

                number=`echo "$line" | cut -c1`

                if [ "$number" == "$linenumber" ]

                then

                echo "what would u like to change"

                echo "\"id,name,address,mobile,email\""

                read edit

                linechange="${linenumber}s"

                sed -i -e "$linechange/.\*/$edit/" $db

                echo record edited

                fi

                done

        fi

;;

"7")

        echo "bye"

;;

\*) echo invalid input

esac

done