```bash
#!/bin/bash

#the script will run immediately from etc
cd /etc

#check if phonebook database directory exists or not
if [ -e phonebookDB ]
        then

        #if exists, enter it
        cd phonebookDB

                #check if phonebook database text file exists or not
                if [  -e phonebookDB.txt ]
                then

                #if exists, change the mode for all(user, group, others) to read,
write and                     execute
                sudo chmod a+rwx phonebookDB.txt

                else

                #if it doesn't exist, creat it then change mode
                sudo touch phonebookDB.txt
                sudo chmod a+rwx phonebookDB.txt
                fi

        #if the phone book database doesn't exist, create aone and creat the phone
book text file
        else
        sudo mkdir phonebookDB
        cd phonebookDB
        sudo touch phonebookDB.txt
        sudo chmod a+rwx phonebookDB.txt
        fi

#check on the user entered options
case $1 in

#i for insert mode
-i)

        read -p "Enter a new name " name

        #search file for entered name
        exist=$(grep  "^$name\b :" phonebookDB.txt)

        #if the name does not exist, it will be add to the text file
        if [ "$exist" == '' ]
        then
                #if flag = 0, phone number is not decimal
                #if flag = 1, phone number is decimal
                flag=0

                while [ "$flag" != 1  ]
                do
                        read -p "Enter a number " number

                        #check if the entered number from the user is a decimal
number

                        #decimal holdes a regex for decimal numbers
                        decimal='^[0-9]+$'

                        if ! [[ "$number" =~ $decimal ]]
                        then
                                sudo echo "error: Not a number."
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                        else
                                flag=1
                        fi
                done

                #append the new name to the phone book data base
                sudo echo "$name : $number">> phonebookDB.txt

        else
                sudo echo "the entered name already exists. "
                sudo echo 'press ctrl+z to exit '
                sudo echo "press 1 to change it's number to a new one."
                sudo echo "press 2 to append a new number to it."
                read -p "enter your choice " choice

                #check the entered choice
                if [ "$choice" == 1 ]
                then

                        #delete the name from the text file
                        sudo sed -i "/^${name}\b :/d" phonebookDB.txt

                        #if flag = 0, phone number is not decimal
                        #if flag = 1, phone number is decimal
                        flag=0

                        while [ "$flag" != 1  ]
                        do
                                read -p "Enter a number " number

                                #check if the entered number from the user is a
decimal number

                                #decimal holdes a regex for decimal numbers
                                decimal='^[0-9]+$'

                                if ! [[ "$number" =~ $decimal ]]
                                then
                                        sudo echo "error: Not a number."
                                else
                                        flag=1
                                fi
                        done

                        #append the new name to the phone book data base
                        sudo echo "$name : $number">> phonebookDB.txt

                elif [ "$choice" == 2 ]
                then
                        #if flag = 0, phone number is not decimal
                        #if flag = 1, phone number is decimal
                        flag=0

                        while [ "$flag" != 1  ]
                        do
                                read -p "Enter another number " number_n

                                #check if the entered number from the user is a
decimal number

                                #decimal holdes a regex for decimal numbers
                                decimal='^[0-9]+$'

                                if ! [[ "$number_n" =~ $decimal ]]
                                then
                                        sudo echo "error: Not a number."
                                else
                                        flag=1
```

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                                        fi
                                done

                                #append the new number to the existing user
                                sudo sed -i "/^${name}\b :/s/$/ : ${number_n}/"
phonebookDB.txt
                        fi


                fi
;;

-v)
        #sort the text file, so the names are in alphabatical order.
        sudo sort phonebookDB.txt

;;

-s)

        read -p "Enter a name to search " name
        grep "$name" phonebookDB.txt
;;

-e)

        #deletes the whole file
        sudo rm phonebookDB.txt 2> /dev/null

        #recreate a new empty datbase tet file
        sudo touch phonebookDB.txt
;;

-d)
        read -p "Enter a name to delete " name

        #search file for entered name
        exist=$(grep  "^$name" phonebookDB.txt)

        #if the name does not exist, a message appers to the user to reenter a name
        if [ "$exist" == '' ]
        then
                sudo echo "the entered name does not exist."
        #if the name exists.
        else
                #show to the user all the names that match.
                sudo echo "the name(s) that match "
                grep  "^$name" phonebookDB.txt

                #ask the user to enter the specifc name to delete.
                read -p "enter the specific name to delete " name
        fi

        #delete the name from the database
        sudo sed -i "/^${name}\b :/d" phonebookDB.txt
;;
*)

        sudo echo "Avilable options are:"
        sudo echo "-i: insert new contact name and number to the phone book."
        sudo echo "-v: view all saved contact details."
        sudo echo "-s: search by contact name. "
        sudo echo "-e: delete all recoords."
        sudo echo "-d: delete only one contact name."
;;
esac;
```