```
if [ -e ~/.phonebookDB.txt ]
#check if database file exists
        #Do Nothing
        echo
else
        touch ~/.phonebookDB.txt
        chmod 777 ~/.phonebookDB.txt
#make a new database hidden file
        echo "Contacts Details: " >> ~/.phonebookDB.txt
fi
case $1 in
-i)
        echo "" >> ~/.phonebookDB.txt
        echo "-----INSERT
MODE - - -
        read -p "Please Insert Contact Name " Name
        grep "+$Name :" ~/.phonebookDB.txt > /dev/null
        if [ $? == 0 ]
        then
                echo "Contact already exists please delete it first "
        read -p "Please Insert PhoneNumber " Phone
        while [[ ! $Phone =~ ^[0-9]+$ ]]
                echo -n "Please enter digits ONLY, i.e. [0-9]"
                read -p "Please Insert PhoneNumbers " Phone
        echo -n +$Name : " " >> ~/.phonebookDB.txt
        echo -n $Phone >> ~/.phonebookDB.txt
        flag=0
        while [ $flag == 0 ]
#loop while user want to add new number
        do
                read -p "Do you want to insert another number [Y/N] " answer
                if [ $answer == "Y" ]
                        then
                        read -p "Please Insert PhoneNumber " Phone
                        while [[ ! $Phone =~ ^[0-9]+$ ]]
                        do
                                 echo
                                 echo -n "Please enter digits ONLY, i.e. [0-9]"
                                 read -p "Please Insert PhoneNumbers "
Phone
                        read -p "Please Insert PhoneNumbers " Phone
echo -n " - "$Phone >> ~/.phonebookDB.txt
                elif [ $answer == "N" ]
                then
                         flag=1
                else
                         echo
                        echo -n "incorrect input Select one of these options (Y) or
(N)"
                        echo
```

```
fi
      done
      echo
      echo "-----END INSERT
MODE - - -
      echo "" ;;
-v)
      echo
      echo "-----VIEW ALL
MODE - - - -
      cat ~/.phonebookDB.txt
      echo
      echo
          "-----END VIEW ALL
MODE-----";;
-s)
      echo
      echo "-----SEARCH
MODE - - - -
      echo
      read -p "Please Insert Contact Name to search for " sName
      grep "+$sName :" ~/.phonebookDB.txt
      if [ $? != 0 ]
      then
            echo "Contact Not Found"
      fi
      echo
      echo "-----END SEARCH
MODE - -
          -----";;
-e)
      echo
          "-----DELETE ALL
      echo
MODE - - -
      echo "Contacts Details: " > ~/.phonebookDB.txt
      echo "" >> ~/.phonebookDB.txt
      echo
      echo "-----END DELETE ALL
           -----";;
MODE - - - - - -
-d)
      echo
      echo "------DELETE
MODE - - - -
       _____
      echo
      read -p "Please Insert Contact Name to delete " dName
      grep "+$dName :" ~/.phonebookDB.txt
      if [ $? != 0 ]
      then
            echo "Contact Not Found"
      sed -i "/+$dName :/c\\" ~/.phonebookDB.txt
      echo
      echo "-----END DELETE
MODE - - -
*)
    #information like man pages :)
      echo
      echo "NAME"
      echo "
               phonebook.sh - PhoneBook Application"
      echo
      echo "SYNOPSIS"
      echo " phonebook.sh [OPTIONS]..."
      echo "DESCRIPTION"
              Manage contacts with the ability to display, add and delete one
```

```
or more contact."
       echo
       echo " -i"
echo " Insert a new contact name and number. "
echo
        echo
       echo "
       echo "
                    View all saved contacts details."
       echo
                -s"
Search by contact name."
       echo "
       echo "
       echo
       echo " -e"
echo " Delete all Phonebook records."
       echo
       echo " -d"
echo " Delete only one contact name."
       echo
       echo "AUTHOR"
       echo " Developed by: Ahmed Zoher (ahmed.o.zoher@gmail.com)"
       echo ;;
esac
```