```bash
#! /bin/bash


################################################################################
# Global Variables
################################################################################
### name of database file
DB_file=.phonebook_db




################################################################################
# utilites
################################################################################
function isContactExist() {
        #statements
        contactInDB=$(grep "$1.*" $DB_file)
        contactInDB="$( echo $contactInDB | cut -d: -f1 )"

        if [[ $contactInDB = $1 ]]; then
                return 1
        else
                return 0
        fi
}

### check if database file not exist, ask user to create one
function checkDataBase() {
        if [[ ! -f "$DB_file" ]]; then
                echo "WARNING!!!"
                echo "Data base file does not exist"
                read -p "Create Database file now[y/n]?" check

                if [[ $check = y ]]; then
                        touch "$DB_file"
                        clear
                else
                        echo "Sorry cannot start without database file."
                        exit
                fi
        fi
}



################################################################################
# Functions
################################################################################

### Insert new contact name and number
function insertName () {
        read -p "Enter contact name: " newName
        read -p "Enter contact number: " newNumber

        if [[ $newName =~ ^[+-]?[0-9]+$ ]]; then
                #statements
                echo "Invalid Name for new contact"
        else
                isContactExist $newName
                temp=$?
                if [[ $temp = 1 ]]        ; then
                        echo "$newName is already exist in phonebook."
                elif [[ $newNumber =~ ^[+-]?[0-9]+$ ]]; then
                        echo "$newName:$newNumber" >> $DB_file
                else
```

```bash
                    echo "Invalid number."
            fi
        fi


}


### View all saved contacts details
function viewAllContact() {

        data="$(cat $DB_file)"
        #echo "${data}"
        IFS=$'\n'
        for line in ${data}; do
                echo "$( echo $line | cut -d: -f1 )        $( echo $line | cut -d:
-f2 )"
        done
        IFS=$' '
}


### Search by contact name
function searchByContact() {
        #statements
        read -p "Enter contact name to find: " nameToFind

        if [[ $nameToFind =~ ^[+-]?[0-9]+$ ]]; then
                echo "Invalid Name for new contact"
        else

                currentName=0
                currentName="$(grep "$nameToFind.*" $DB_file)"

                IFS=$'\n'

                for line in ${currentName}; do
                        echo "$( echo $line | cut -d: -f1 )        $( echo $line |
cut -d: -f2 )"
                done

                IFS=$' '
        fi
}


### Delete all records
function deleteAllRecords() {
        #statements
        echo "You are about to remove all records from phonebook."
        echo "This operation cannot undo it."
        read -p "Do you want to continue[y/n]?" input

        if [[ $input = 'y' ]]; then
                echo > $DB_file
                echo "3ala el donya el salankaty XD."
        else
                echo "yb2a nbtl l3b b2a X("
        fi
}


### Delete onle one contact name
function deleteContactByName() {
        read -p "Enter contact name to remove: " nameToFind
```

```bash
        isContactExist $nameToFind
        temp=$?

        if [[ $temp = 1 ]]; then
                sed -i "/$nameToFind/d" $DB_file > /dev/null
                echo "$nameToFind removed"

        else
                echo "Contact not found."
        fi
}



#################################################################

checkDataBase



if [[ $# == 0 ]];then
        echo "choose one of the following options:"
        echo "   -i       Insert new contact name and number."
        echo "   -v       View all saved contacts details."
        echo "   -s       Search by contact name."
        echo "   -e       Delete all records."
        echo "   -d       Delete only one contact name."

elif [[ $# == 1 ]];then
        if [[ $1 = -i ]];then
                insertName

        elif [[ $1 = -v ]];then
                viewAllContact

        elif [[ $1 = -s ]];then
                searchByContact

        elif [[ $1 = -e ]];then
                deleteAllRecords

        elif [[ $1 = -d ]];then
                deleteContactByName

        else
                echo "invalid option "
        fi
elif [[ $# > 1 ]];then
        echo "please enter one option only"
fi
```