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#!/bin/bash
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#####
# Global Variables
#####
### name of database file
DB_file=.phonebook_db
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#####
# 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
}
}
```

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#####
# Functions
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```
### 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
            echo "Invalid number."
        fi
    fi
}
```

```

        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 nbt1 l3b b2a X("
    fi
}

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

    isContactExist $nameToFind

```

```

temp=$?

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

else
    echo "Contact not found."
fi
}

#####
# Main Logic
#####

checkDataBase

if [[ $# > 1 ]]; then
    #statements
    echo "cannot pass more than one argument."

else
    case $1 in
        -i ) insertName
            ;;

        -v ) viewAllContact
            ;;

        -s ) searchByContact
            ;;

        -e ) deleteAllRecords
            ;;

        -d ) deleteContactByName
            ;;

        *)
            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."
    esac
fi

```