# Contact Management System

**Problem Statement** 

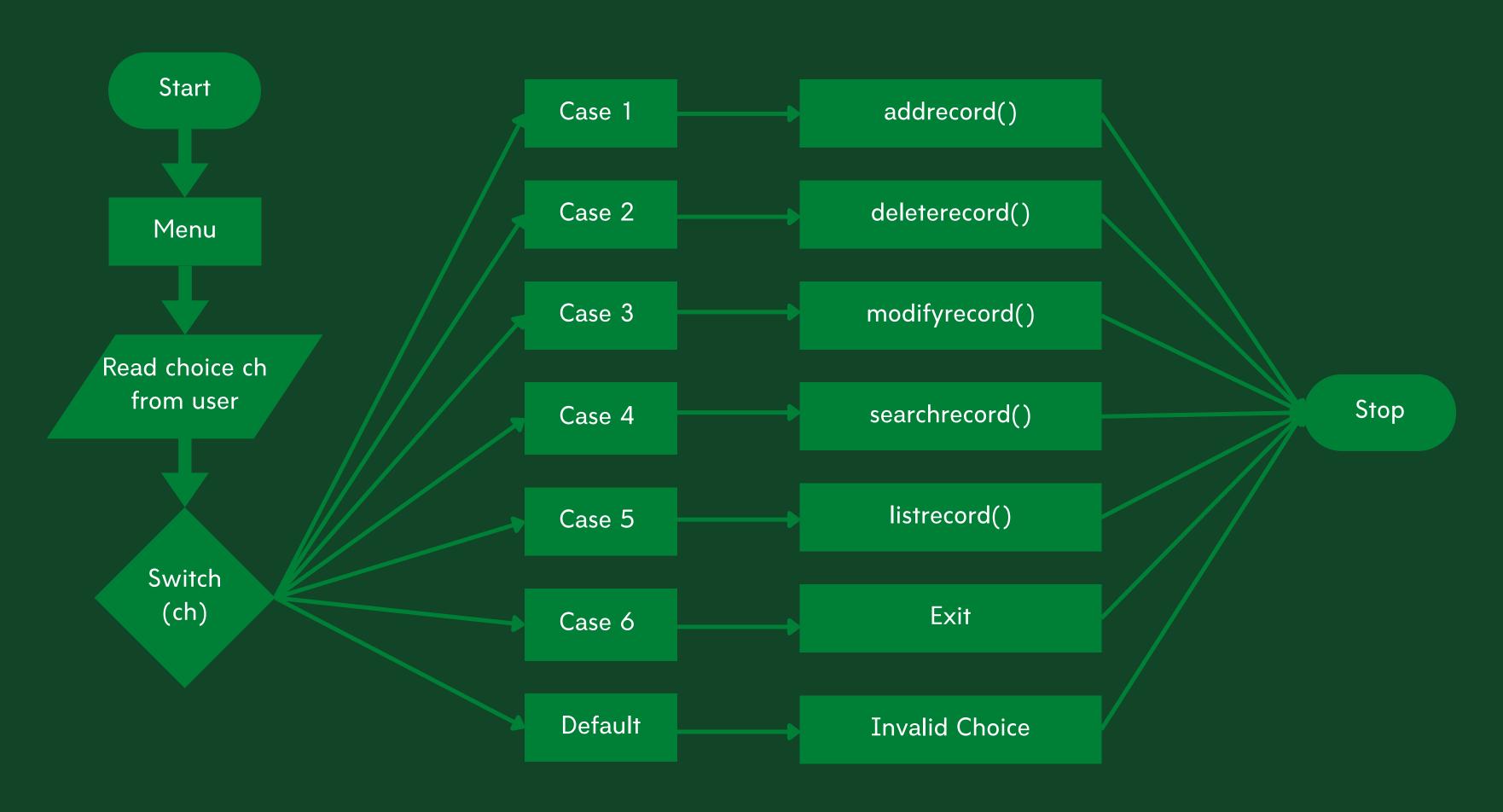
### Phone Book Application

Development of phone book application using Data Structures and File Handling in C Programming Language

#### Operations

- Insertion
- Deletion
- Modification
- Searching
- Listing

#### Flowchart for Main Menu



#### Working of Main Menu Function

```
cd "/Users/harshpruthi/
harshpruthi@Harshs-MacE
pruthi/Desktop/Phone_Bc
Phone Book Mini-Project
Menu
1.Add Contact
2.Delete Contact
3.Modify Contact
4. Search Contact
5.List Contact
6.Exit
Enter choice:
```

A main menu void-type function containing the contents of main menu was constructed and function call was made under int main()

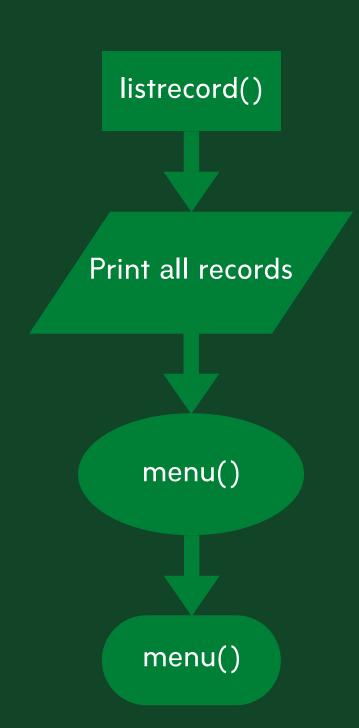
A user could enter the appropriate choice of operation to be performed and using switch case as visulised, function call will be made and will redirect to the appropriate functions

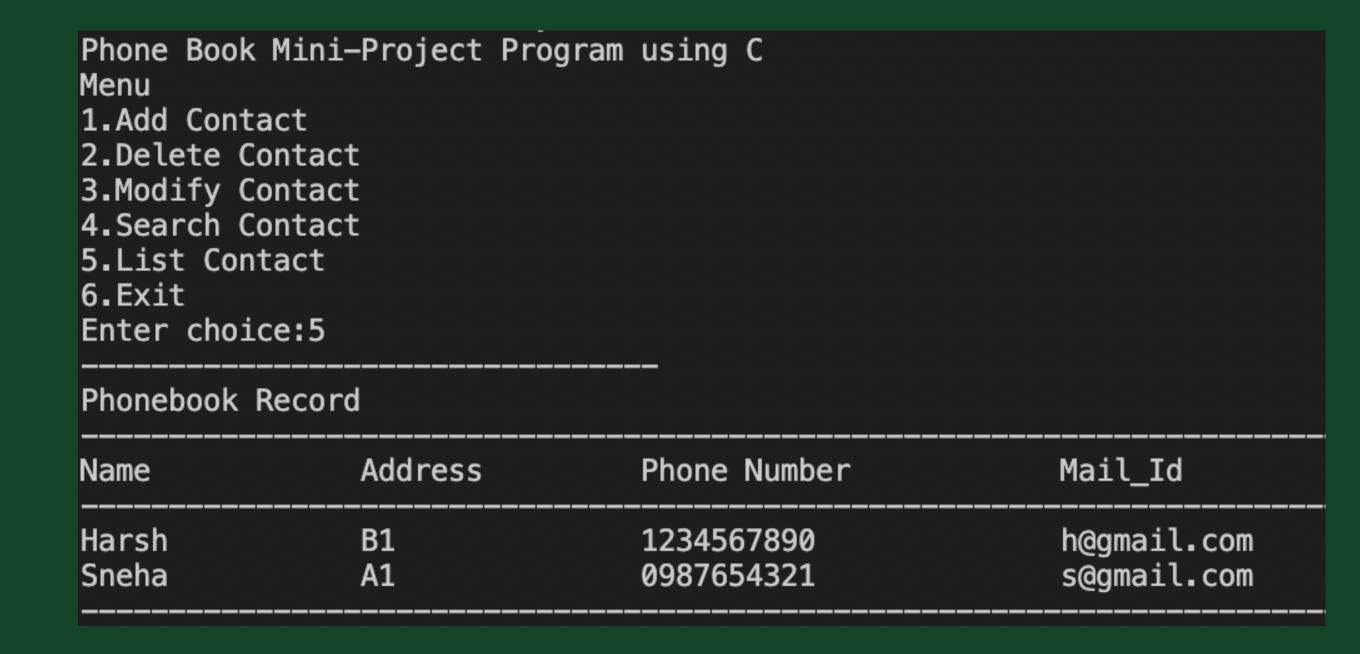
### Working of Insertion Function



```
ca / obcrb/ narbipracity peaktop/ r none_book_App
harshpruthi@Harshs-MacBook-Air-2 Phone_Book_Ar
pruthi/Desktop/Phone_Book_Application/"main
Phone Book Mini-Project Program using C
Menu
1.Add Contact
2.Delete Contact
3.Modify Contact
4.Search Contact
5.List Contact
6.Exit
Enter choice:1
Enter name:
Harsh
Enter the address:B1
Enter 10 digit mobile number:1234567890
Enter E-mail:
h@gmail.com
Record Saved
Phone Book Mini-Project Program using C
Menu
1.Add Contact
2.Delete Contact
3.Modify Contact
4.Search Contact
5.List Contact
6.Exit
Enter choice:1
Enter name:
Sneha
Enter the address:A1
Enter 10 digit mobile number: 1234567890
Contact already exists
Enter 10 digit mobile number:0987654321
Enter E-mail:
s@gmail.com
Record Saved
Phone Book Mini-Project Program using C
```

# Working of Listing Records





### Working of Insertion Function



```
ca / obcrb/ narbipracity peaktop/ r none_book_App
harshpruthi@Harshs-MacBook-Air-2 Phone_Book_Ar
pruthi/Desktop/Phone_Book_Application/"main
Phone Book Mini-Project Program using C
Menu
1.Add Contact
2.Delete Contact
3.Modify Contact
4.Search Contact
5.List Contact
6.Exit
Enter choice:1
Enter name:
Harsh
Enter the address:B1
Enter 10 digit mobile number:1234567890
Enter E-mail:
h@gmail.com
Record Saved
Phone Book Mini-Project Program using C
Menu
1.Add Contact
2.Delete Contact
3.Modify Contact
4.Search Contact
5.List Contact
6.Exit
Enter choice:1
Enter name:
Sneha
Enter the address:A1
Enter 10 digit mobile number: 1234567890
Contact already exists
Enter 10 digit mobile number:0987654321
Enter E-mail:
s@gmail.com
Record Saved
Phone Book Mini-Project Program using C
```

# Working of Searching Function



```
ca / oaci a/ nai anpi a chii/ ocarcop/ i none_boor_npp
harshpruthi@Harshs-MacBook-Air-2 Phone_Book_Ar
pruthi/Desktop/Phone_Book_Application/"main
Phone Book Mini-Project Program using C
Menu
1.Add Contact
2.Delete Contact
3.Modify Contact
4.Search Contact
5.List Contact
6.Exit
Enter choice:1
Enter name:
Harsh
Enter the address:B1
Enter 10 digit mobile number: 1234567890
Enter E-mail:
h@gmail.com
Record Saved
Phone Book Mini-Project Program using C
Menu
1.Add Contact
2.Delete Contact
3.Modify Contact
4.Search Contact
5.List Contact
6.Exit
Enter choice:1
Enter name:
Sneha
Enter the address:A1
Enter 10 digit mobile number: 1234567890
Contact already exists
Enter 10 digit mobile number:0987654321
Enter E-mail:
s@gmail.com
Record Saved
Phone Book Mini-Project Program using C
```

## Working of Searching Function

menu()

searchrecord() Read contact name to be searched No Contact not (name==search) found Yes Print all details

```
ca / oaci a/ nai anpi a chii/ ocarcop/ i none_boor_npp
harshpruthi@Harshs-MacBook-Air-2 Phone_Book_Ar
pruthi/Desktop/Phone_Book_Application/"main
Phone Book Mini-Project Program using C
Menu
1.Add Contact
2.Delete Contact
3.Modify Contact
4.Search Contact
5.List Contact
6.Exit
Enter choice:1
Enter name:
Harsh
Enter the address:B1
Enter 10 digit mobile number: 1234567890
Enter E-mail:
h@gmail.com
Record Saved
Phone Book Mini-Project Program using C
Menu
1.Add Contact
2.Delete Contact
3.Modify Contact
4.Search Contact
5.List Contact
6.Exit
Enter choice:1
Enter name:
Sneha
Enter the address:A1
Enter 10 digit mobile number: 1234567890
Contact already exists
Enter 10 digit mobile number:0987654321
Enter E-mail:
s@gmail.com
Record Saved
Phone Book Mini-Project Program using C
```

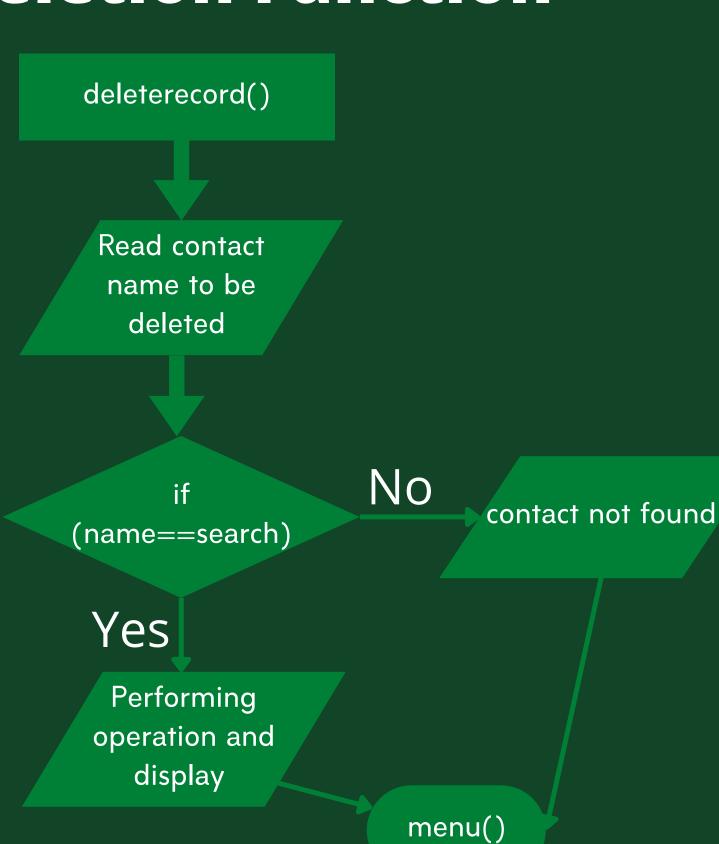
## Working of Modifying Function

modifyrecord() Read contact name to be modified No Record not (name==search) found Yes Replacing with new input

menu()

```
Phone Book Mini-Project Program using C
Menu
1.Add Contact
2.Delete Contact
3.Modify Contact
4. Search Contact
5.List Contact
6.Exit
Enter choice:3
Enter contact name to be modified :Sneha
Enter name:Anmol
Enter the address: Gurugram
Enter 10 digit phone no:1231231230
Enter e-mail ID: a@gmail.com
Contact is modifiedPhone Book Mini-Project Program using C
Menu
1.Add Contact
2.Delete Contact
3.Modify Contact
4. Search Contact
5.List Contact
6.Exit
Enter choice:5
Phonebook Record
                Address
                                Phone Number
                                                        Mail Id
Name
                B1
                                1234567890
                                                        h@gmail.com
Harsh
                                                                a@gmail.com
                                        1231231230
Anmol
                Gurugram
```

### Working of Deletion Function



```
Phone Book Mini-Project Program using C
Menu
1.Add Contact
2.Delete Contact
3.Modify Contact
4.Search Contact
5.List Contact
6.Exit
Enter choice:2
Enter contact name:Anmol
Record deleted successfully
Phone Book Mini-Project Program using C
Menu
1.Add Contact
2.Delete Contact
3.Modify Contact
4. Search Contact
5.List Contact
6.Exit
Enter choice:5
Phonebook Record
                                                        Mail_Id
                Address
                                Phone Number
Name
                                                         h@gmail.com
Harsh
                B1
                                1234567890
```

#### Conclusion

Phonebook program is user friendly and easy to manage and handle contact details. This program allows user to insert, delete, modify and search contacts based on user choice using file handling. Each operation is segmented as an individual function and hence control goes to each block for execution as per the choice of user.

# Thank you!