

Phonebook Management **System**

GROUP PROJECT BY: -

Ayushi Das (RA2111003010256)

Dewashish Dubey (RA2111003010257)

Raghav Khanna (RA2111003010260)

Introduction:

This programme uses files as database to perform file handling operations such as add, search, modify and delete records to manage records of a phonebook.

Here, a menu window is provided to the user with different functions to be performed such as-

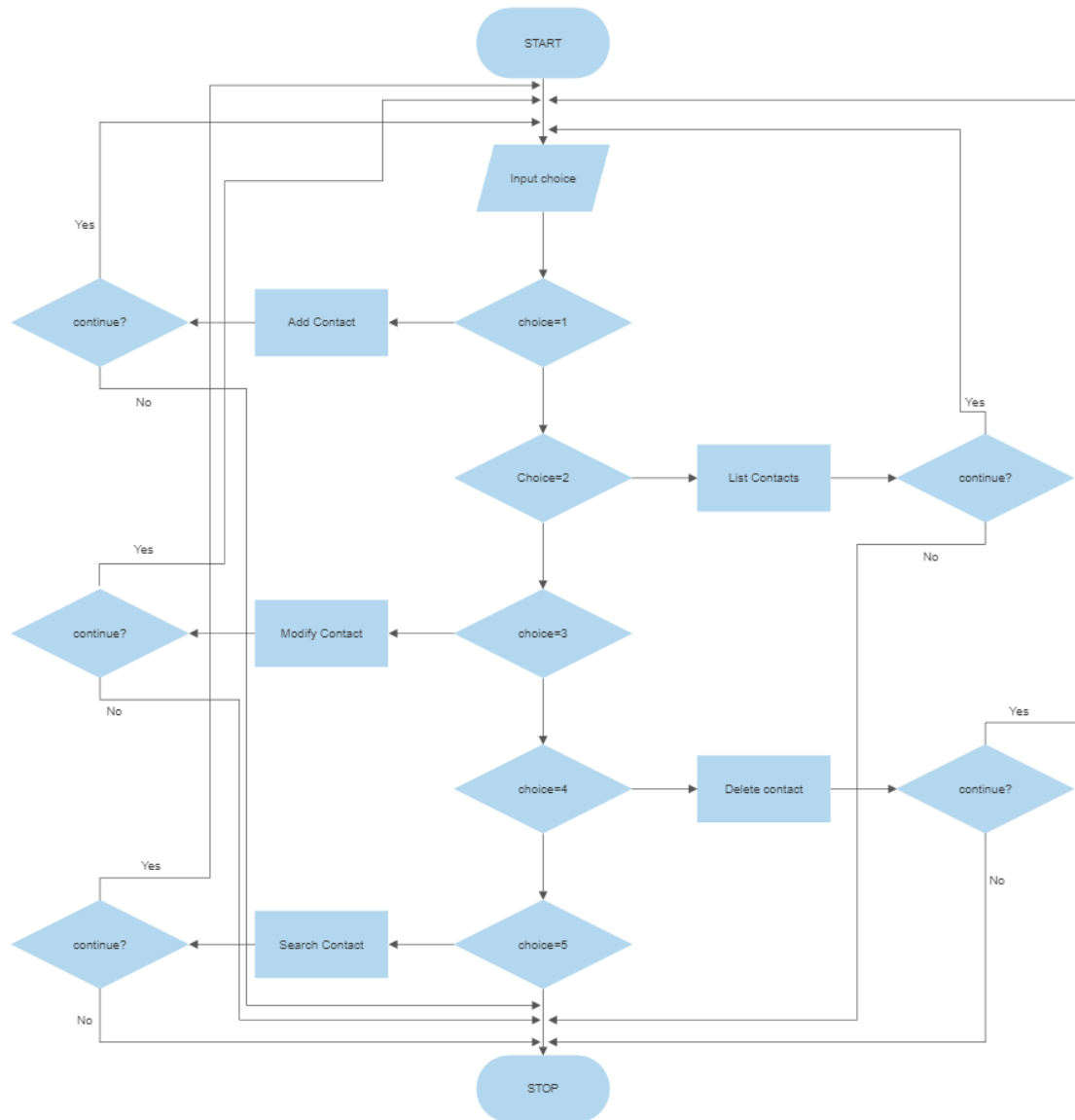
- 1.Adding new number to the phonebook.
2. Listing out contacts of the phonebook.
- 3.Modifying an existing contact.
- 4.Searching a contact in the phonebook.
- 5.Deleting a contact from the phonebook.

Features of Phonebook Management System in C:

Simple functions have been added to the code to manipulate data using structures and file handling, Functionalities of this system are,

- 1.Adding new number to the phonebook.
2. Listing out contacts of the phonebook.
- 3.Modifying an existing contact.
- 4.Searching a contact in the phonebook.
- 5.Deleting a contact from the phonebook.

Flowchart :



Algorithm:-

1. Input choice from the user.
2. if choice=1:
 - Add record to phonebook
 - Ask to continue
 - if user wants to continue:
 - Back to 1
 - else
 - End program
3. if choice=2:
 - list records of the phonebook
 - Ask to continue
 - if user wants to continue:
 - Back to 1
 - else
 - End program
4. if choice=3:
 - Modify a record of phonebook
 - Ask to continue
 - if user wants to continue:

Back to 1

else:

End program

5. if choice=4:

Delete record from phonebook

Ask to continue

if user wants to continue:

Back to 1

else

End program

6. if choice=5:

Search record in phonebook

Ask to continue

if user wants to continue:

Back to 1

else

End program

7. End Program.

Code:

```
#include<stdio.h>
#include<conio.h>
#include<string.h>
#include<stdlib.h>
#include<windows.h>
struct person
{
    char name[35];
    char address[50];
    char father_name[35];
    char mother_name[30];
    long int mble_no;
    char sex[8];
    char mail[100];
    char citision_no[20];

};
void menu();
void got();
void start();
void back();
```

```
void addrecord();
void listrecord();
void modifyrecord();
void deleterecord();
void searchrecord();
int main()
{
    start();
    return 0;
}
void back()
{
    start();
}
void start()
{
    menu();
}
void menu()
{
    system("cls");
```

```
printf("\t\t*****WELCOME TO  
PHONEBOOK*****");
```

```
printf("\n\n\t\t\t MENU\t\t\n\n");  
printf("\t1.Add New \t2.List \t3.Exit  
\n\t4.Modify \t5.Search\t6.Delete\n");
```

```
switch(getch())  
{  
    case '1':  
        addrecord();  
        break;  
    case '2': listrecord();  
        break;  
    case '3': exit(0);  
        break;  
    case '4': modifyrecord();  
        break;  
    case '5': searchrecord();  
        break;  
    case '6': deleterecord();  
        break;
```


default:

```
system("cls");  
printf("\nEnter 1 to 6 only");  
printf("\nEnter any key to continue");  
getch();
```

```
menu();
```

```
}
```

```
}
```

```
void addrecord()
```

```
{
```

```
    system("cls");
```

```
    FILE *f;
```

```
    struct person p;
```

```
    printf("\t*****Adding New Record to the  
Phonebook*****\n");
```

```
    f=fopen("project","ab+");
```

```
    printf("\n-----  
");
```

```
    printf("\nEnter name: ");
```

```
    got(p.name);
```

```
    printf("\nEnter the address: ");
```

```

    got(p.address);
    printf("\nEnter father's name: ");
    got(p.father_name);
    printf("\nEnter mother's name: ");
    got(p.mother_name);
    printf("\nEnter phone no.:");
    scanf("%ld",&p.mble_no);
    printf("Enter sex:");
    got(p.sex);
    printf("\nEnter e-mail:");
    got(p.mail);
    printf("\nEnter citizen no:");
    got(p.citision_no);
    fwrite(&p,sizeof(p),1,f);
    printf("\n-----
");
    fflush(stdin);
    printf("\nRecord Saved Successfully!");
    printf("\n-----
");

fclose(f);

```

```

printf("\nEnter any key to continue");

    getch();
    system("cls");
    menu();
}
void listrecord()
{
    system("cls");
    printf("\t*****List of Records in the
Phonebook*****\n");
    printf("\n-----");
    struct person p;
    FILE *f;
    f=fopen("project","rb");
    if(f==NULL)
    {
        printf("\nfile opening error in listing :");
        exit(1);
    }
    while(fread(&p,sizeof(p),1,f)==1)

```

```

    {
        printf("\nYOUR RECORD IS");
        printf("\nName=%s\nAdress=%s\nFather
name=%s\nMother name=%s\nMobile
no=%ld\nSex=%s\nE-mail=%s\nCitizen
no=%s",p.name,p.address,p.father_name,p.mot
her_name,p.mble_no,p.sex,p.mail,p.citision_no);
        getch();
        //system("cls");
    }
    fclose(f);
    printf("\n-----");
    printf("\nEnter any key to continue");
    getch();
    system("cls");
    menu();
}

void searchrecord()
{
    system("cls");
    printf("\t*****Searching a Record in the
Phonebook*****\n");
    struct person p;

```

```

FILE *f;
char name[100];
f=fopen("project","rb");
if(f==NULL)
{
    printf("\n error in opening\a\a\a\a");
    exit(1);
}
printf("\nEnter name of person to search\n");
got(name);
printf("\n-----
\n");
while(fread(&p,sizeof(p),1,f)==1)
{
    if(strcmp(p.name,name)==0)
    {
        printf("\n\tDetail Information About
%s",name);

printf("\n\nName:%s\naddress:%s\nFather
name:%s\nMother name:%s\nMobile
no:%ld\nsex:%s\nE-mail:%s\nCitizen
no:%s",p.name,p.address,p.father_name,p.moth
er_name,p.mble_no,p.sex,p.mail,p.citision_no);

```

```

        printf("\n-----
---");
    }
    else
    {
        printf("\nContact not found\n");
        printf("\n-----
---");
    }
}
fclose(f);
printf("\nEnter any key to continue");
getch();
system("cls");
menu();
}
void deleterecord()
{
    system("cls");
    printf("\t*****Deleting a Record from the the
Phonebook*****\n");
    struct person p;
    FILE *f,*ft;

```

```

int flag;
char name[100];
f=fopen("project","rb");
if(f==NULL)
{

    printf("CONTACT'S DATA NOT ADDED
YET.");

}
else
{
    ft=fopen("temp","wb+");
    if(ft==NULL)

        printf("file opening error");
    else

        {

            printf("\n-----
\n");

```

```

printf("ENTER CONTACT'S NAME:");
got(name);

fflush(stdin);
while(fread(&p,sizeof(p),1,f)==1)
{
    if(strcmp(p.name,name)!=0)
        fwrite(&p,sizeof(p),1,ft);
    if(strcmp(p.name,name)==0)
        flag=1;
}
fclose(f);
fclose(ft);
if(flag!=1)
{
    printf("\nNO CONTACT'S RECORD TO
DELETE.");
    remove("temp.txt");
}
else
{
    remove("project");
}

```



```

        rename("temp.txt","project");
        printf("\nRECORD DELETED
SUCCESSFULLY.");
        printf("\n-----
---");
    }
}
}

```

```

printf("\nEnter any key to continue");

```

```

    getch();
    system("cls");
menu();
}

```

```

void modifyrecord()
{
    system("cls");
    printf("\t*****Modifying a Record in the
Phonebook*****\n");
    int c;
    FILE *f;
    int flag=0;

```

```

struct person p,s;
char name[50];
f=fopen("project","rb+");
if(f==NULL)
{
    printf("CONTACT'S DATA NOT ADDED
YET.");
    exit(1);
}
else
{
    system("cls");
    printf("\nEnter CONTACT'S NAME TO
MODIFY:\n");
    got(name);
    while(fread(&p,sizeof(p),1,f)==1)
    {
        if(strcmp(name,p.name)==0)
        {

```

```
printf("\n Enter name:");  
got(s.name);  
printf("\nEnter the address:");  
got(s.address);  
printf("\nEnter father's name:");  
got(s.father_name);  
printf("\nEnter mother's name:");  
got(s.mother_name);  
printf("\nEnter phone no:");  
scanf("%ld",&s.mble_no);  
printf("\nEnter sex:");  
got(s.sex);  
printf("\nEnter e-mail:");  
got(s.mail);  
printf("\nEnter citizen no\n");  
got(s.citision_no);  
fseek(f,-sizeof(p),SEEK_CUR);  
fwrite(&s,sizeof(p),1,f);  
flag=1;
```

```
break;
```

```
}
```

```
fflush(stdin);
```

```
}
```

```
if(flag==1)
```

```
{
```

```
    printf("\n your data id modified");
```

```
}
```

```
else
```

```
{
```

```
    printf(" \n data is not found");
```

```
}
```

```
fclose(f);
```

```
}
```

```
printf("\n Enter any key to continue");
```

```
        getch();
        system("cls");
        menu();

    }
    void got(char *name)
    {

        int i=0,j;
        char c,ch;
        do
        {
            c=getch();
            if(c!=8&& c!=13)
            {
                *(name+i)=c;
                putchar(c);
                i++;
            }
            if(c==8)
            {
                if(i>0)
```

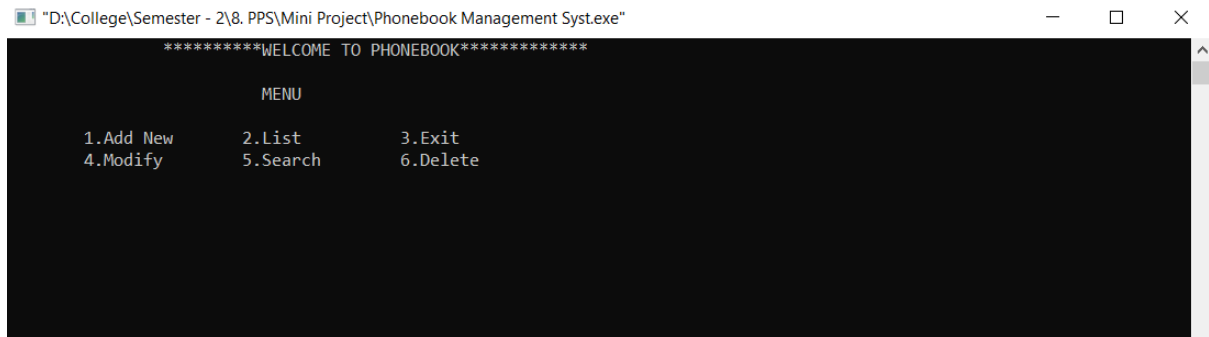
```
        {
            i--;
        }
        system("cls");
        for(j=0;j<i;j++)
        {
            ch=*(name+j);
            putchar(ch);

        }

    }
}while(c!=13);
    *(name+i)='\0';
}
```

Output Screen:

First Screen -

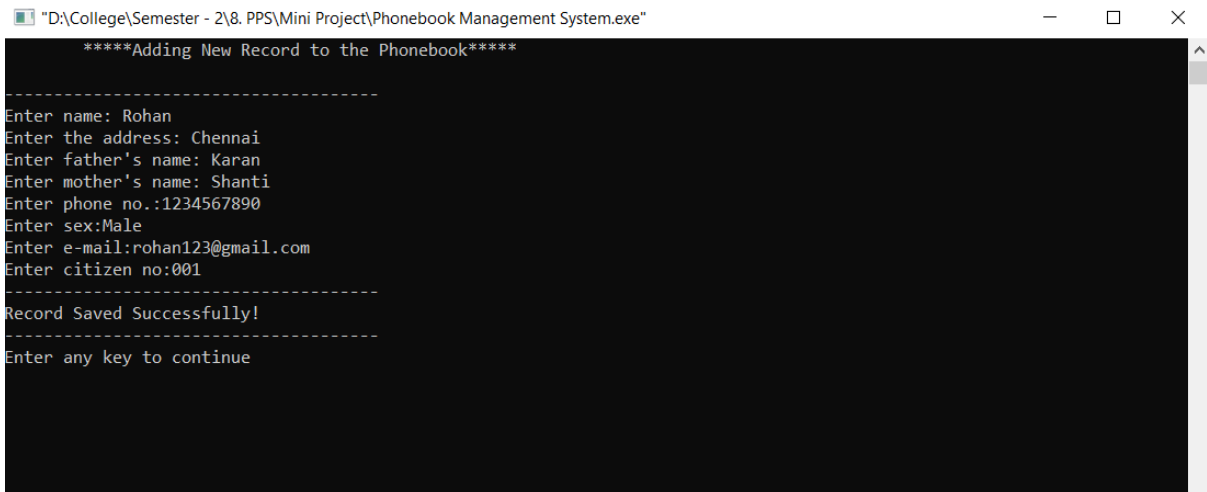


```
"D:\College\Semester - 2\8. PPS\Mini Project\Phonebook Management System.exe"
*****WELCOME TO PHONEBOOK*****

MENU

1.Add New    2.List    3.Exit
4.Modify    5.Search  6.Delete
```

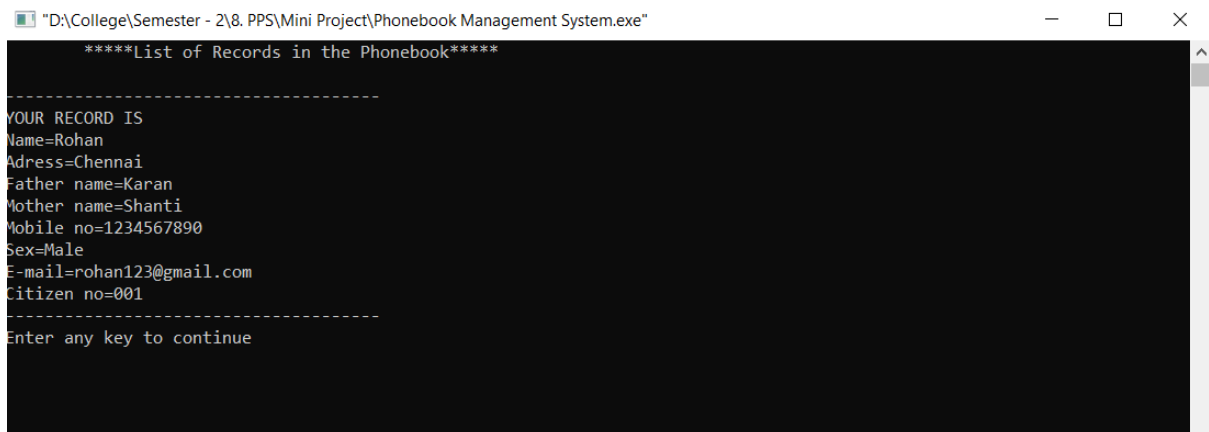
Adding record to the phonebook -



```
"D:\College\Semester - 2\8. PPS\Mini Project\Phonebook Management System.exe"
****Adding New Record to the Phonebook****

-----
Enter name: Rohan
Enter the address: Chennai
Enter father's name: Karan
Enter mother's name: Shanti
Enter phone no.:1234567890
Enter sex:Male
Enter e-mail:rohan123@gmail.com
Enter citizen no:001
-----
Record Saved Successfully!
-----
Enter any key to continue
```

Displaying all the records in the phonebook -

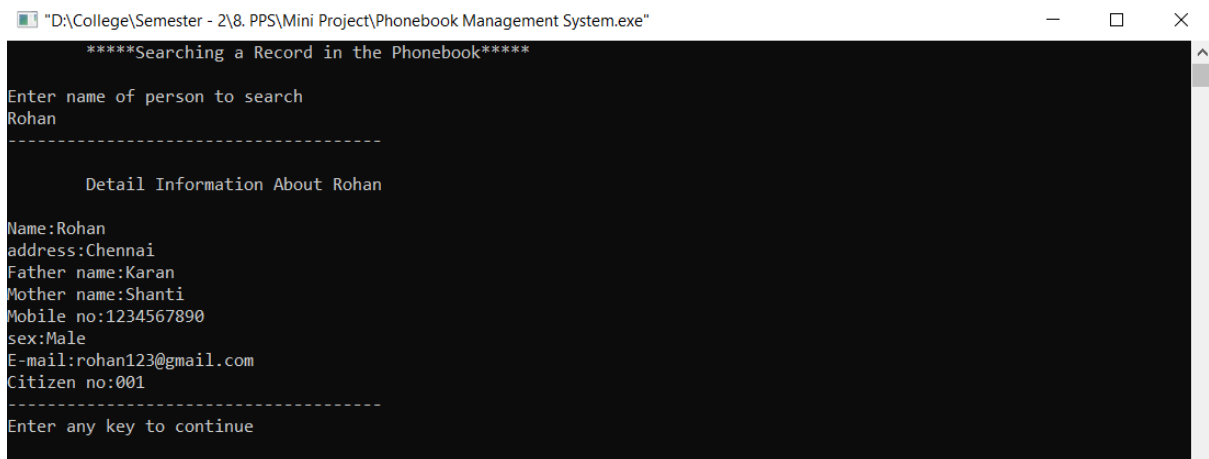


```
"D:\College\Semester - 2\8. PPS\Mini Project\Phonebook Management System.exe"

*****List of Records in the Phonebook*****

-----
YOUR RECORD IS
Name=Rohan
Address=Chennai
Father name=Karan
Mother name=Shanti
Mobile no=1234567890
Sex=Male
E-mail=rohan123@gmail.com
Citizen no=001
-----
Enter any key to continue
```

Searching a Record in the phonebook -



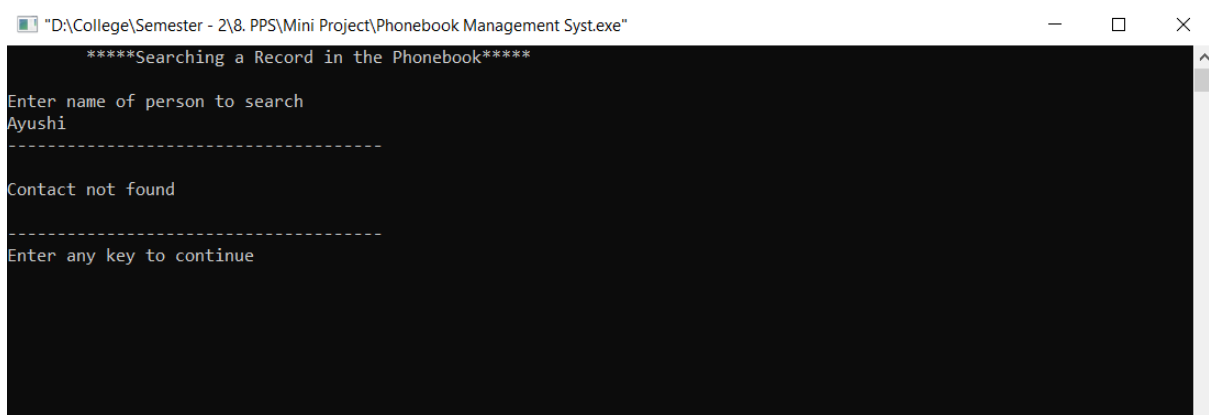
```
"D:\College\Semester - 2\8. PPS\Mini Project\Phonebook Management System.exe"

*****Searching a Record in the Phonebook*****

Enter name of person to search
Rohan
-----

Detail Information About Rohan

Name:Rohan
address:Chennai
Father name:Karan
Mother name:Shanti
Mobile no:1234567890
sex:Male
E-mail:rohan123@gmail.com
Citizen no:001
-----
Enter any key to continue
```



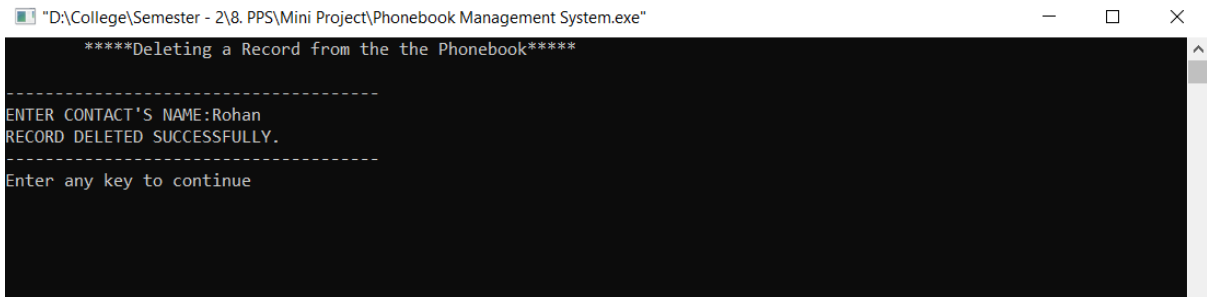
```
"D:\College\Semester - 2\8. PPS\Mini Project\Phonebook Management System.exe"

*****Searching a Record in the Phonebook*****

Enter name of person to search
Ayushi
-----

Contact not found
-----
Enter any key to continue
```

Deleting a record from the phonebook –



```
"D:\College\Semester - 2\8. PPS\Mini Project\Phonebook Management System.exe"

*****Deleting a Record from the the Phonebook*****

-----
ENTER CONTACT'S NAME:Rohan
RECORD DELETED SUCCESSFULLY.
-----
Enter any key to continue
```

THANK YOU!