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&Engineering



**CSE 103: Structured Programming**  
**Fall 2021**  
**East West University**  
**Department of Computer Science and Engineering**  
**Project**

**Date: 9 January, 2022**

**Digital Phone Book**



**Taslima Akter Sathi : 2021-1-60-114**



**Sagor Ahmed : 2021-3-60-117**



**Ifrat Jahan Oishi : 2021-3-60-229**

# CSE103 – Structured Programming

## Project Evaluation Rubrics

	<b>Max.</b>	<b>Awarded</b>
<b>A. Report</b>		
i. Introduction / Problem statement		
iv. System Design		
v. Program output (Screen shots)		
vi. Source code		
vii. Disk/CD neatly attached (Y/N)		
<b>B. Source Code</b>		
i. Style		
Indentation		
Self-documentation		
ii. Modularity (small size functions)		
iii. Error reporting capabilities		
iv. Code efficiency, strategy, and originality		
<b>C. Program Execution</b>		
i. Compile without errors		
ii. User friendly		
iii. Error free during runtime		
iv. Program output		
<b>D. Presentation and Demonstration [Psychomotor Domain]</b>		
i. Presentation and communication skills ( <b>Soft skill</b> )		
<b>E. Bonus</b>		
i. Extra significant features		
<b>TOTAL</b>	11	

**CSE103 – Structured Programming  
Project Declaration**  
(Student 1)

**Student ID:** 2021-1-60-114

**Name:** Taslima Akter Sathi

**Session:** 1

**Project No:** 5

**Date submitted:** 9 January, 2022

**Deadline of the project:** 9 January, 2022

**My contribution in this project:** 33.33%

**Description of my contribution in this project:** Although we work as team, I personally worked phonebook contact list, block list & searched option.

**Number of hours I spent in doing this project:** 7 days.

(Student 2)

**Student ID:** 2021-3-60-117

**Name:** Sagor Ahmed

**Session:** 3

**Project No:** 5

**Date submitted:** 9 January, 2022

**Deadline of the project:** 9 January, 2022

**My contribution in this project:** 33.33%

**Description of my contribution in this project:** Although we work as team, I personally work with design of the Phonebook, block and unblocking of phonebook.

**Number of hours I spent in doing this project:** 7 days.

(Student 3)

**Student ID:** 2021-3-60-229

**Name:** Ifrat Jahan Oishi

## **Session: 3**

## Project No: 5

**Date submitted:** 9 January, 2022

**Deadline of the project: 9 January, 2022**

**My contribution in this project: 33.33%**

**Description of my contribution in this project:** Although we work as team, I personally worked on contact edit, remove & exit option.

**Number of hours I spent in doing this project: 7 days.**

We hereby certify that this project is done by us. We did not copy from any other resources. We declare that no part of our work has been copied from or by other groups, but we take ideas from other groups.

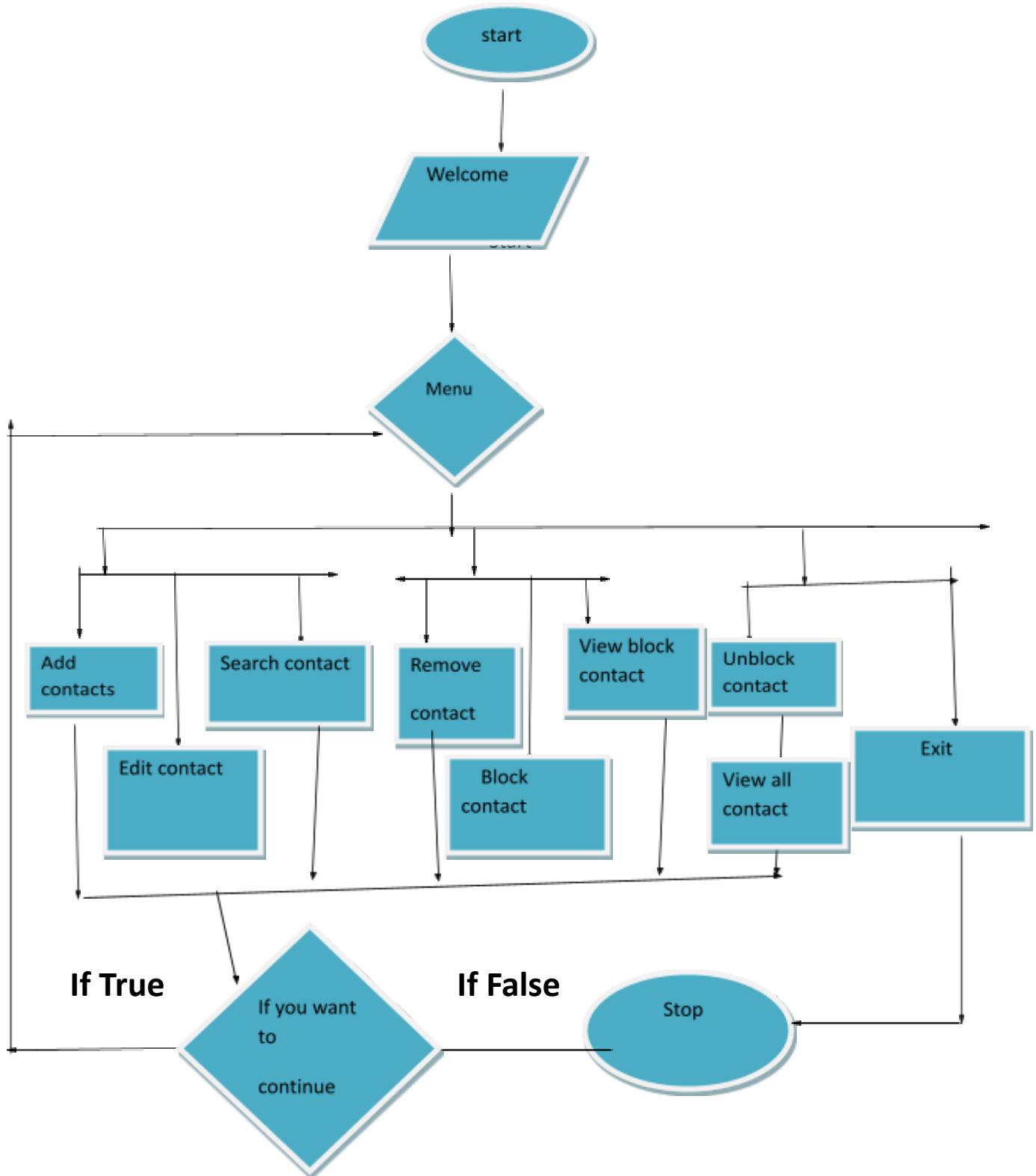
## **Signature of the students who created this project:**

- |                                    |                              |
|------------------------------------|------------------------------|
| <b>1. Signature:</b> Taslima Sathi | <b>Date:</b> 9 January, 2022 |
| <b>2. Signature:</b> Sagor Ahmed   | <b>Date:</b> 9 January, 2022 |
| <b>3. Signature:</b> Ifrat oishi   | <b>Date:</b> 9 January, 2022 |

## **INTRODUCTION OF PHONEBOOK**

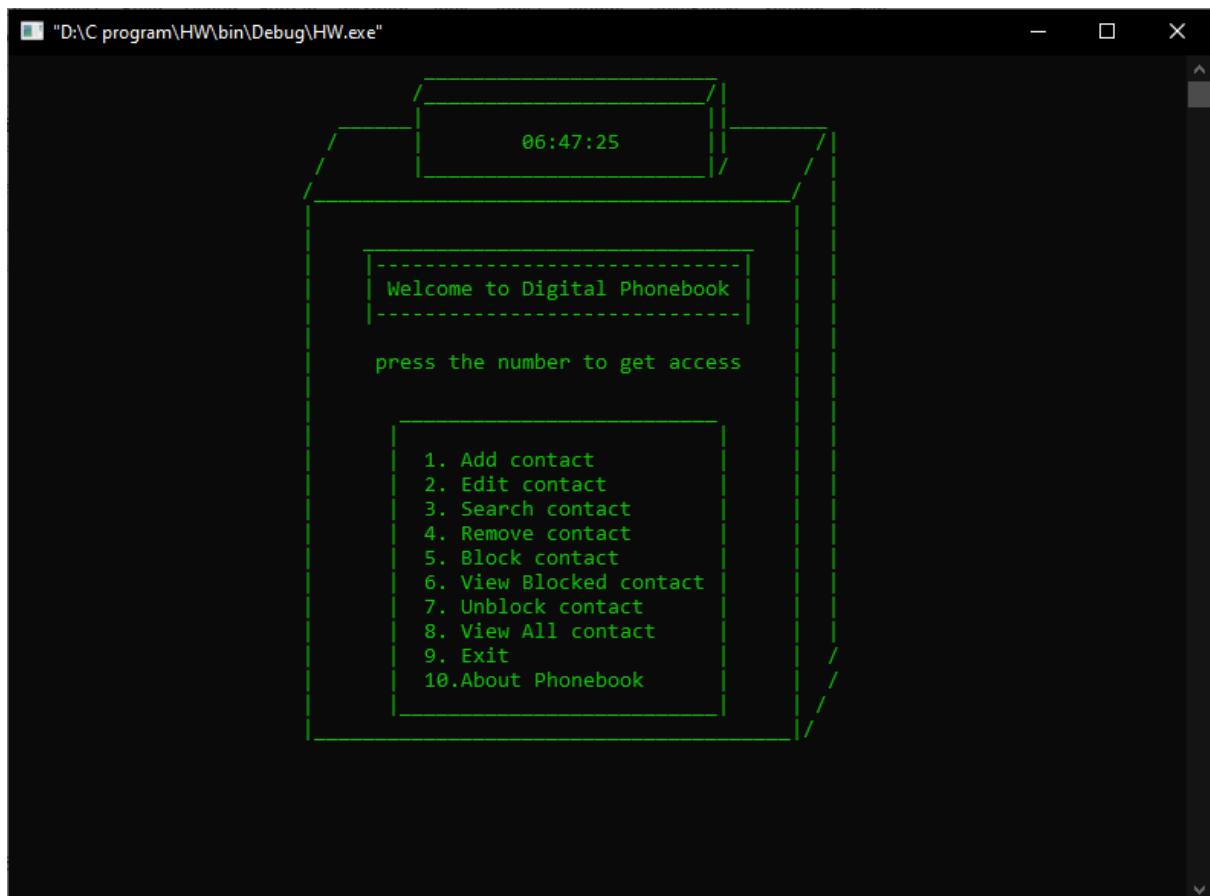
- This project is created by C programming. Basically this application is about phonebook. There are so many features in this application. Add contact, edit contact, search, delete, block contact and also unblock contact.
- Here we can add new contact and editing them or deleting them. The main feature is block & unblocking contacts. Here we can easily block any contact and also can unblock them later.
- Every personal information phone number, name, email, address and department will be asked while adding a contact into the Phone book and the record can be modified later.
- Every single information needed to be valid. Otherwise the program will not take the information you gave. So you have to input the valid information again.
- This application is build by some functions and every functions are so easy to understand.
- We are still working on our project. People who are using our application will get an update of this phonebook application. Then everyone will experience the new features.

# SYSTEM DESING

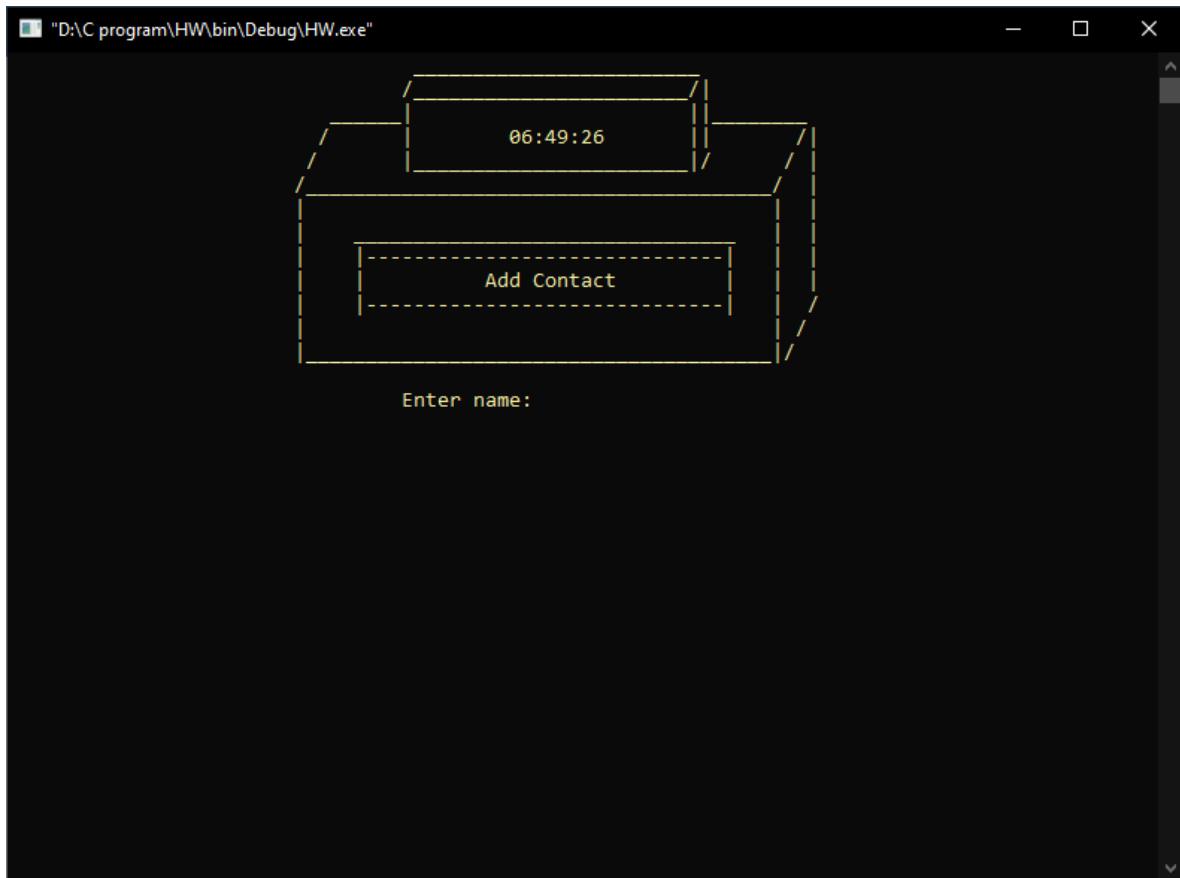


# PROGRAM OUTPUT

## 1. Main menu:



## 2. Add contact:



```
D:\C program\HW\bin\Debug\HW.exe
06:49:26
Add Contact
Enter name: Sagor_Ahmed_munna
Enter Number: 01787294002
Enter mail: sagorahmedmunna@gmail.com
Enter address: Gazipur,Dhaka
Enter department: CSE
Loading . . .
Update Successfully.
```

### 3. Edit contact:

The screenshot shows a terminal window titled "D:\C program\HW\bin\Debug\HW.exe". The window has a dark background with yellow text. At the top center, it displays the time "06:54:10". Below the time, there is a dashed rectangular box containing the text "Edit Contact". The main area of the terminal shows the following interaction:

```
Enter name or number: Oishi
Contact has found

Enter new name: Ifrat_Jahan_Oishi
Enter new number: 01888888888
Enter new mail: 2021-3-60-229@std.ewubd.edu
Enter new address: kumilla
Enter new department: CSE

Loading . . .
Update Successfully

Press any key to go back
to the main menu
```

The terminal also contains several instances of the message "Press 's' to skip this step!" followed by a question mark.

### 4. Search contact:

D:\C program\HW\bin\Debug\HW.exe

07:02:35

Search Contact

press s to skip !  
Enter name or number: Sagor\_Ahmed\_Munna  
Contact has found

Name : Sagor_Ahmed_Munna
Number : 01787294002
Mail : sagorahmedmunna@gmail.com
Address : Gazipur,Dhaka
Department: CSE

Press any key to go back to the main menu

## 5. Remove contact:

D:\C program\HW\bin\Debug\HW.exe

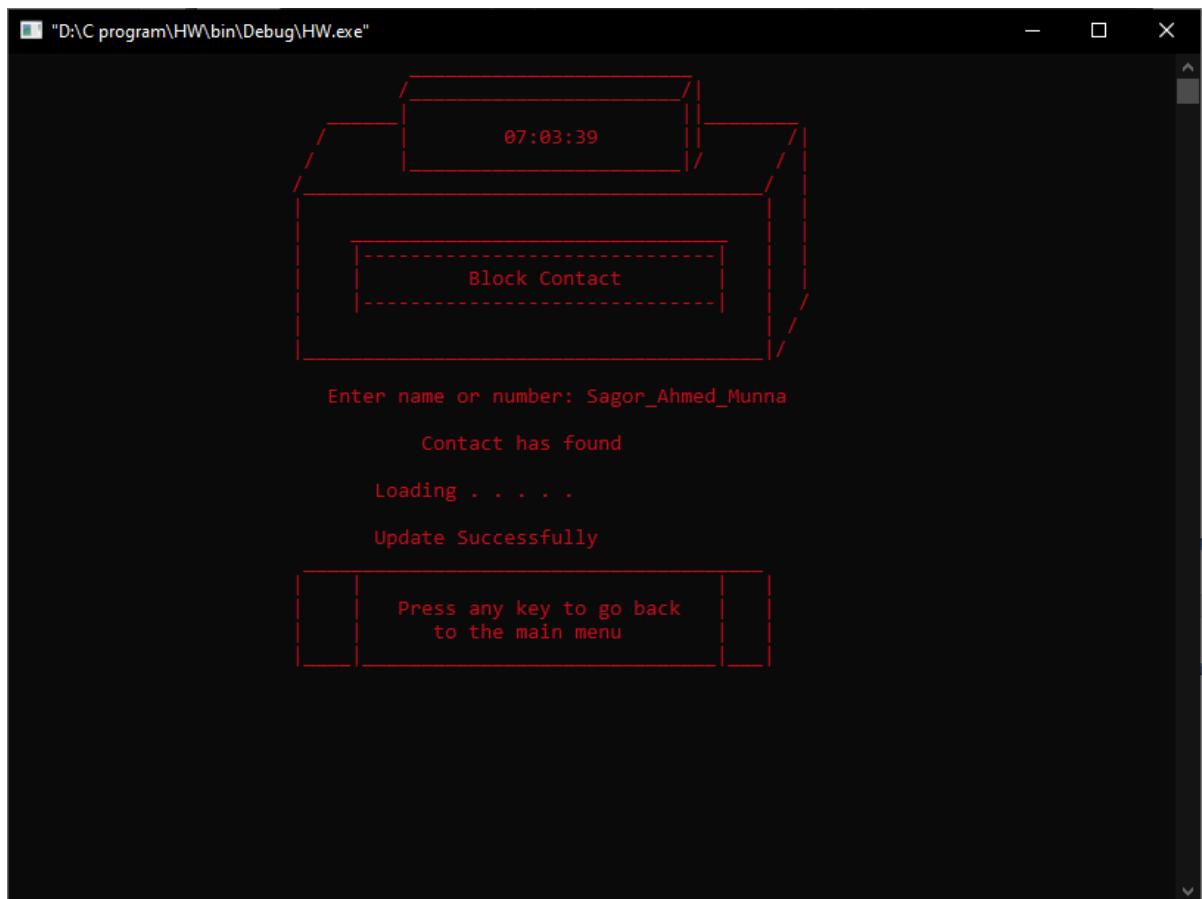
07:11:02

Remove Contact

Enter name or number: Sagor\_Ahmed\_Munna  
Contact has found  
Loading . . . .  
Update Successfully

Press any key to go back to the main menu

## **6. Block contact:**



## **7. View Blocked contact:**

```
"D:\C program\HW\bin\Debug\HW.exe"

07:05:41

View Blocked Contact

Name      : Sagor_Ahmed_Munna
Number    : 01787294002
Mail      : sagorahmedmunna@gmail.com
Address   : Gazipur,Dhaka
Department: CSE

Press any key to go back
to the main menu
```

## 8. Unblock contact:

```
"D:\C program\HW\bin\Debug\HW.exe"

07:06:51

Unblock Contact

Enter name or number: Sagor_Ahmed_Munna
Contact has found
Loading . . .
Update Successfully

Press any key to go back
to the main menu
```

## 9. All contact:

```
D:\C program\HW\bin\Debug\HW.exe
07:07:37
All Contact

Contact no: 1
| Name      : Farabi
| Number    : 01666666666
| Mail      : farabi@gmail.com
| Address   : Meherpur
| Department: CSE

Contact no: 2
| Name      : Ifrat_Jahan_Oishi
| Number    : 01888888888
| Mail      : 2021-3-60-229@std.ewubd.edu
| Address   : kumilla
| Department: CSE

Contact no: 3
| Name      : Sagor_Ahmed_Munna
| Number    : 01787294002
| Mail      : sagorahmedmunna@gmail.com
| Address   : Gazipur,Dhaka
| Department: CSE
```

```
D:\C program\HW\bin\Debug\HW.exe"

Contact no: 6
| Name      : nushrat
| Number    : 01333333333
| Mail      : s
| Address   : s
| Department: s

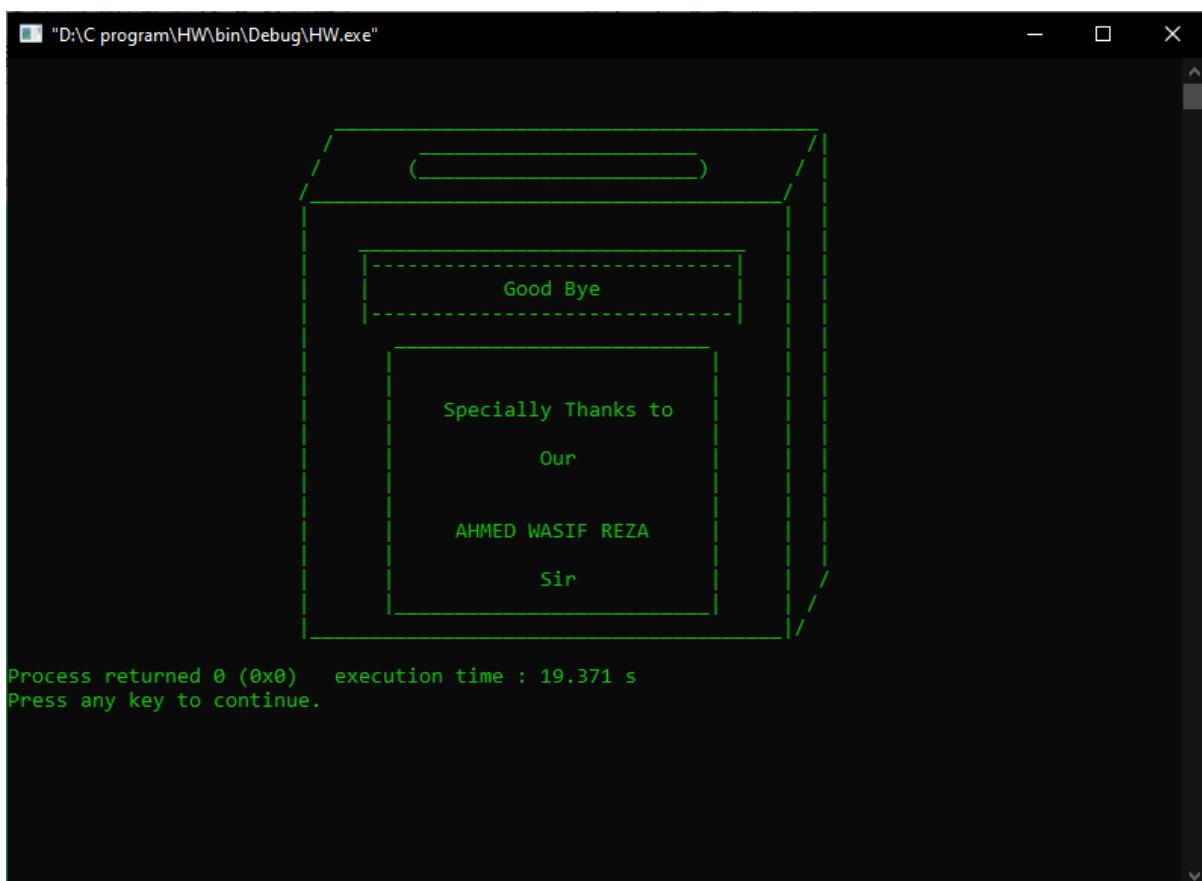
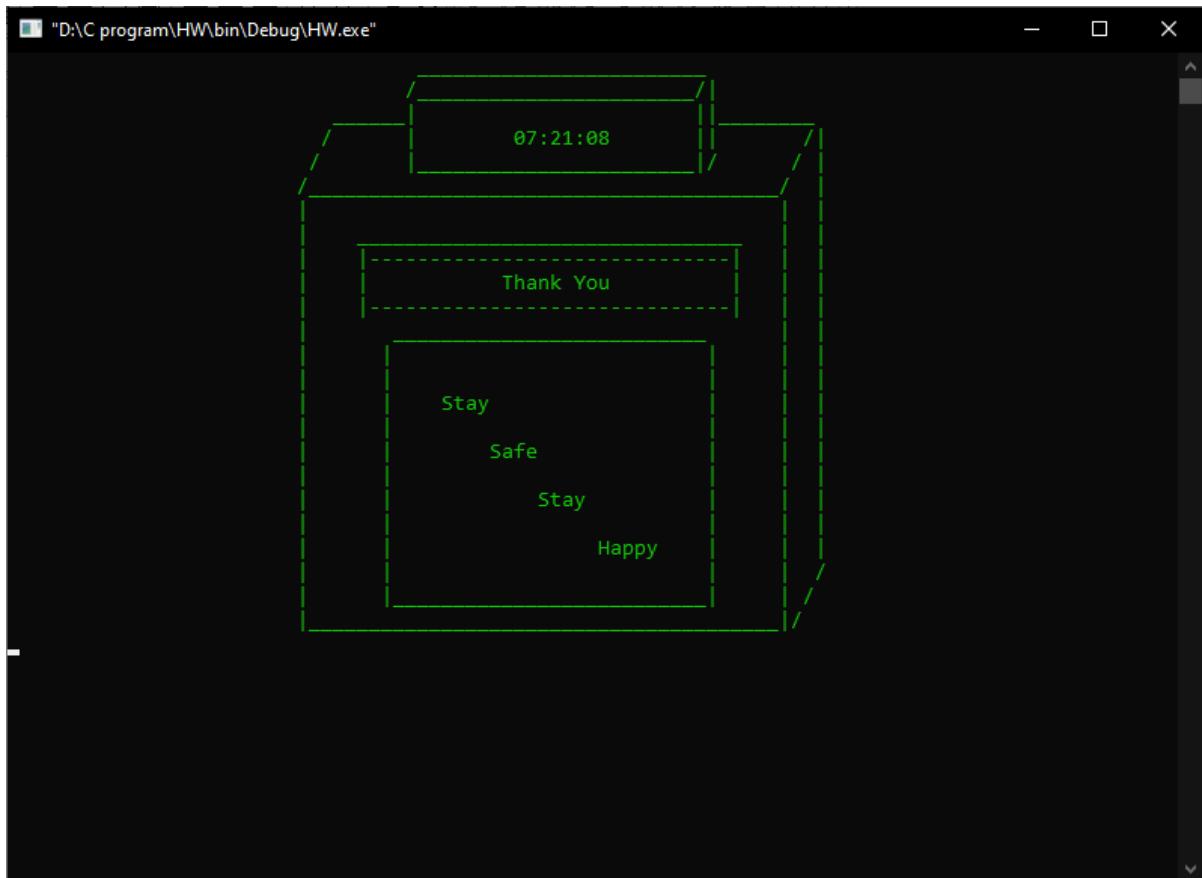
Contact no: 7
| Name      : sagor
| Number    : 01787294002
| Mail      : s
| Address   : s
| Department: s

Contact no: 8
| Name      : t
| Number    : 01787294004
| Mail      : sagor.com
| Address   : dhaka
| Department: cse

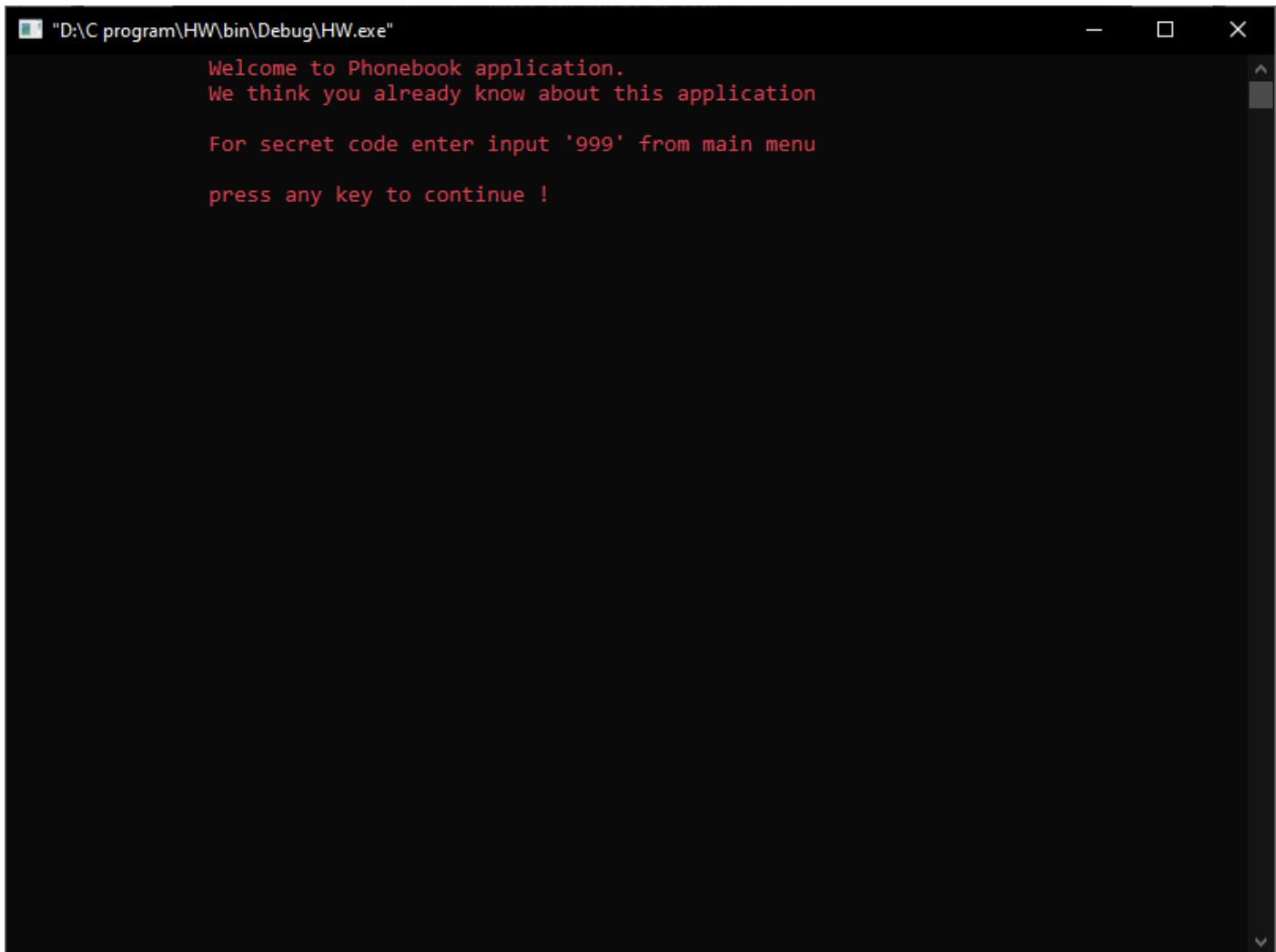
Total contact= 8

Press any key to go back
to the main menu
```

**Exit:**



## About Phone Book:



"D:\C program\HW\bin\Debug\HW.exe"

Welcome to Phonebook application.  
We think you already know about this application  
For secret code enter input '999' from main menu  
press any key to continue !

**Secret Code:**

## **LIMITATION**

**There are some limitation in this project.**

- It is not possible to attach any kind of picture or media.

# SOURCE CODE

```
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
#include <time.h>
#include <conio.h>
#include <windows.h>

void Option();
void HoldMenu();
void Option();
void Secret(){

    system("cls");
    system("color 04");

    int i,j, rows=9;
    printf("\t\t\t\t\t");
    for(i = rows/2; i <= rows; i+=2){

        for(j = 1; j < rows-i; j+=2){

            printf(" ");
        }

        for(j = 1; j <= i; j++){

            printf("%c",3);
        }

        for(j = 1; j <= rows-i; j++){

            printf(" ");
        }

        for(j = 1; j <= i; j++){

            printf("%c",3);
        }
    }

    printf("\n\t\t\t\t\t");Sleep(50);
}
```

```

}

for(i = rows; i >= 1; i--){
    if(i!=rows)
        printf("\t\t\t\t\t");
    for(j = i; j < rows; j++){
        printf(" ");
    }
    for(j = 1; j <= (i*2)-1; j++){
        printf("%c",3);
    }
    printf("\n");Sleep(50);
}
printf("\n\n\tTeam members:");Sleep(50);
printf("\n\t-----");Sleep(50);
printf("\n\n\tTaslima Akter Sathi\t\t Sagor Ahmed \t\t Ifrat Jahan Oishi\n");Sleep(50);
printf("\t 2021-1-60-114 \t\t 2021-3-60-117\t\t 2021-3-60-229\n");
}

void About(){
    system("cls");
    printf("\t\tWelcome to Phonebook application.\n"
           "\t\tWe think you already know about this\n"
           "application\n"
           "\n\t\tFor secret code enter input '999'\n"
           "from main menu\n");
    printf("\n\t\tpress any key to continue !\n");
    getch();
    HoldMenu();Option();
}

void EditContact(){
    system("cls");
    system("color 06");
}

```



```

CountName++;

}

if(CountName==strlen(name))

    break;

else{

    PlaySound(TEXT("error.wav"),NULL,SND_ASYNC);

    printf("\t\t\t Invalid name\n\n\t\t\t Enter again: ");

    scanf("%s",name);

}

printf("\n\t\t\t Enter new number: ");

scanf("%s",num);

while(1){

    if((num[0]=='0'&&num[1]=='1')&&(num[2]=='3' | | num[2]=='5' | | num[2]=='6' | | num[2]=='7' | | num[2]=='8' | | num[2]=='9')

        &&(strlen(num)==11))

        break;

    else{

        PlaySound(TEXT("error.wav"),NULL,SND_ASYNC);

        printf("\t\t\t Invalid number\n\n\t\t\t Enter again: ");

        scanf("%s",num);

    }

}

printf("Press 's' to skip this step!");

printf("\n\t\t\t");

printf("Enter new mail: ");

scanf("%s",mail);

if(strlen(mail)==1&&(mail[0]=='S' | | mail[0]=='s'))

    printf("Skipped this step!\n");

else{

```

```

while(1){

    int CountMail=0;

    for(int
i=0;(mail[i]>='a'&&mail[i]<='z')||(mail[i]>='0'&&mail[i]<='9')||mail[i]=='@'||mail[i]=='.'||mail[i]=='-'||mail[i]=='_';i++){

        CountMail++;

    }

    int L=strlen(mail);

    if((CountMail==L)&&(mail[L-4]=='.')&&((mail[L-3]=='c'&&mail[L-2]=='o'&&mail[L-1]=='m')||(mail[L-3]=='e'&&mail[L-2]=='d'&&mail[L-1]=='u')))

        break;

    else{

        PlaySound(TEXT("error.wav"),NULL,SND_ASYNC);

        printf("\t\t\t Invalid Mail\n\n\t\t\t Enter again: ");

        scanf("%s",mail);

    }

    }

    printf("Press 's' to skip this step!");

    printf("\n\t\t\t Enter new address: ");

    scanf("%s",address);

    if(strlen(address)==1&&(address[0]=='S'||address[0]=='s'))

        printf("Skipped this step!\n");

    else{

        while(1){

            int CountAddress=0;

            for(int
i=0;(address[i]>='A'&&address[i]<='Z')||(address[i]>='a'&&address[i]<='z')||address[i]==','||address[i]=='_'||(address[i]>='0'&&address[i]<='9');i++){

                CountAddress++;

            }

            if(CountAddress==strlen(address))

```

```

break;

else{

    PlaySound(TEXT("error.wav"),NULL,SND_ASYNC);

    printf("\t\t\t Invalid Address\n\n\t\t\t Enter again: ");

    scanf("%s",address);

}

}

printf("Press 's' to skip this step!");

printf("\n\t\t\t Enter new department: ");

scanf("%s",department);

if(strlen(department)==1&&(department[0]=='S'||department[0]=='s'))

printf("Skipped this step!\n");

else{

while(1){

    int CountDepartment=0;

    for(int

i=0;(department[i]>='A'&&department[i]<='Z')||(department[i]>='a'&&department[i]<='z')||department[i]=='_';i+ +){

        CountDepartment++;

    }

    if(CountDepartment==strlen(department))

        break;

    else{

        PlaySound(TEXT("error.wav"),NULL,SND_ASYNC);

        printf("\t\t\t Invalid Department\n\n\t\t\t Enter again: ");

        scanf("%s",department);

    }

}

}

fprintf(fp1,"%s %s %s %s %s\n",name,num,mail,address,department);

```

```
flag++;

}

else{

    fprintf(fp1,"%s %s %s %s %s\n",name,num,mail,address,department);

}

}

fclose(fp);

fclose(fp1);

fclose(fp);

fclose(fp1);

fp=fopen("phonebook.txt","w");

fp1=fopen("temp.txt","r");

while(fscanf(fp1,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

    fprintf(fp,"%s %s %s %s %s\n",name,num,mail,address,department);

}

fclose(fp);

fclose(fp1);

remove("temp.txt");

}

else{

FILE *fp,*fp1;

fp=fopen("phonebook.txt","r");

fp1=fopen("temp.txt","w");

char name[50];

char num[20];

char mail[50];

char address[50];

char department[20];

while(fscanf(fp,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

if(strcmp(target,name)==0){
```

```

PlaySound(TEXT("contact_found.wav"),NULL,SND_ASYNC);

printf("\t\t\tContact has found\n");

printf("\n\n\t\t\tEnter new name: ");

scanf("%s",name);

while(1){

int CountName=0;

for(int i=0;(name[i]>='A'&&name[i]<='Z')| |(name[i]>='a'&&name[i]<='z')| |name[i]=='_';i++){

CountName++;

}

if(CountName==strlen(name))

break;

else{

PlaySound(TEXT("error.wav"),NULL,SND_ASYNC);

printf("\t\t\tInvalid name\n\n\t\t\tEnter again: ");

scanf("%s",name);

}

}

printf("\n\t\t\tEnter new number: ");

scanf("%s",num);

while(1){

if((num[0]=='0'&&num[1]=='1')&&(num[2]=='3' | | num[2]=='5' | | num[2]=='6' | | num[2]=='7' | | num[2]=='8' | | num[2]=='9')

&&(strlen(num)==11))

break;

else{

PlaySound(TEXT("error.wav"),NULL,SND_ASYNC);

printf("\t\t\tInvalid number\n\n\t\t\tEnter again: ");

scanf("%s",num);

}

}

```

```

}

printf("Press 's' to skip this step!");

printf("\n\t\tEnter new mail: ");

scanf("%s",mail);

if(strlen(mail)==1&&(mail[0]=='S'||mail[0]=='s'))

printf("Skipped this step!\n");

else{

while(1){

int CountMail=0;

for(int

i=0;(mail[i]>='a'&&mail[i]<='z')||(mail[i]>='0'&&mail[i]<='9')||mail[i]== '@'||mail[i]== '.'||mail[i]== '-'||mail[i]== '_';i++){

CountMail++;

}

int L=strlen(mail);

if((CountMail==L)&&(mail[L-4]=='.')&&((mail[L-3]=='c'&&mail[L-2]=='o'&&mail[L-1]=='m')||(mail[L-3]=='e'&&mail[L-2]=='d'&&mail[L-1]=='u')))

break;

else{

PlaySound(TEXT("error.wav"),NULL,SND_ASYNC);

printf("\t\t\tInvalid Mail\n\n\t\t\tEnter again: ");

scanf("%s",mail);

}

}

printf("Press 's' to skip this step!");

printf("\n\t\tEnter new address: ");

scanf("%s",address);

if(strlen(address)==1&&(address[0]=='S'||address[0]=='s'))

printf("Skipped this step!\n");

else{

```

```

while(1){

    int CountAddress=0;

    for(int
i=0;(address[i]>='A'&&address[i]<='Z')||(address[i]>='a'&&address[i]<='z')||address[i]==','||address[i]=='_'||(address[i]>='0'&&address[i]<='9');i++){

        CountAddress++;

    }

    if(CountAddress==strlen(address))

        break;

    else{

        PlaySound(TEXT("error.wav"),NULL,SND_ASYNC);

        printf("\t\t\t Invalid Address\n\n\t\t\t Enter again: ");

        scanf("%s",address);

    }

    }

    printf("Press 's' to skip this step!");

    printf("\n\t\t\t Enter new department: ");

    scanf("%s",department);

    if(strlen(department)==1&&(department[0]=='S'||department[0]=='s'))

        printf("Skipped this step!\n");

    else{

        while(1){

            int CountDepartment=0;

            for(int
i=0;(department[i]>='A'&&department[i]<='Z')||(department[i]>='a'&&department[i]<='z')||department[i]=='_';i+=
+){

                CountDepartment++;

            }

            if(CountDepartment==strlen(department))

                break;

        else{

```

```

PlaySound(TEXT("error.wav"),NULL,SND_ASYNC);

printf("\t\t\t Invalid Department\n\n\t\t\t Enter again: ");

scanf("%s",department);

}

}

}

fprintf(fp1,"%s %s %s %s %s\n",name,num,mail,address,department);

flag++;

}

else{

fprintf(fp1,"%s %s %s %s %s\n",name,num,mail,address,department);

}

}

fclose(fp);

fclose(fp1);

fclose(fp);

fclose(fp1);

fp=fopen("phonebook.txt","w");

fp1=fopen("temp.txt","r");

while(fscanf(fp1,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

fprintf(fp,"%s %s %s %s %s\n",name,num,mail,address,department);

}

fclose(fp);

fclose(fp1);

remove("temp.txt");

}

if(flag==0){

PlaySound(TEXT("nothing_found.wav"),NULL,SND_ASYNC);

printf("\n\t\t\t Nothing Found\n");

printf("\n\t\t\tPress 1 to search again or others to stop\n");

```

```
int again;

printf("\t\t\t");
scanf("%d",&again);

if(again==1){

EditContact();

}

else{

Loading();Back();

printf("\t\t\t");
getch();

HoldMenu();Option();

}

}

else{

Loading();

Back();

printf("\t\t\t");
getch();

HoldMenu();Option();

}

}

void menu1(){

printf("\t\t\t\n");
printf("\t\t\t\n");
printf("\t\t\t _____ \n");Sleep(35);
printf("\t\t\t / _____ / |\n");Sleep(35);
printf("\t\t\t / (_____) / |\n");Sleep(35);
printf("\t\t\t/ _____ / |\n");Sleep(35);
printf("\t\t\t| |\n");Sleep(35);
```

```

printf("\t\t\t| _____ | |\n");Sleep(35);

printf("\t\t\t|-----| |\n");Sleep(35);

printf("\t\t\t| Welcome to Digital Phonebook | |\n");Sleep(35);

printf("\t\t\t|-----| |\n");Sleep(35);

printf("\t\t\t| |\n");Sleep(35);

printf("\t\t\t| press the number to get access | |\n");Sleep(35);

printf("\t\t\t| |\n");Sleep(35);

printf("\t\t\t| _____ | |\n");Sleep(35);

printf("\t\t\t| | |\n");Sleep(35);

printf("\t\t\t| 1. Add contact | |\n");Sleep(35);

printf("\t\t\t| 2. Edit contact | |\n");Sleep(35);

printf("\t\t\t| 3. Search contact | |\n");Sleep(35);

printf("\t\t\t| 4. Remove contact | |\n");Sleep(35);

printf("\t\t\t| 5. Block contact | |\n");Sleep(35);

printf("\t\t\t| 6. View Blocked contact | |\n");Sleep(35);

printf("\t\t\t| 7. Unblock contact | |\n");Sleep(35);

printf("\t\t\t| 8. View All contact | |\n");Sleep(35);

printf("\t\t\t| 9. Exit | |\n");Sleep(35);

printf("\t\t\t| 10. About Phonebook | |\n");Sleep(35);

printf("\t\t\t| _____ | |\n");Sleep(35);

printf("\t\t\t| |\n");Sleep(35);

}

void menu_body(){

printf("\t\t\t/_____| |\n");

printf("\t\t\t| |\n");

printf("\t\t\t| _____ | |\n");

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

printf("\t\t\t| Welcome to Digital Phonebook | |\n");

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

printf("\t\t\t| |\n");

```

```

printf("\t\t\t| press the number to get access | |\n");
printf("\t\t\t| |\n");
printf("\t\t\t| _____ | |\n");
printf("\t\t\t| | |\n");
printf("\t\t\t| 1. Add contact | | |\n");
printf("\t\t\t| 2. Edit contact | | |\n");
printf("\t\t\t| 3. Search contact | | |\n");
printf("\t\t\t| 4. Remove contact | | |\n");
printf("\t\t\t| 5. Block contact | | |\n");
printf("\t\t\t| 6. View Blocked contact | | |\n");
printf("\t\t\t| 7. Unblock contact | | |\n");
printf("\t\t\t| 8. View All contact | | |\n");
printf("\t\t\t| 9. Exit | | |\n");
printf("\t\t\t| 10. About Phonebook | | |\n");Sleep(35);
printf("\t\t\t| _____ | |\n");
printf("\t\t\t| /_____ | |\n");
}

```

```

void menu2(){
system("cls");
printf("\t\t\t\n");
printf("\t\t\t\n");
printf("\t\t\t _____ \n");
printf("\t\t\t / _____ /|\ / |\n");
printf("\t\t\t / _____ /|\ / |\n");
}

```

```

void menu3(){
system("cls");

```

```
printf("\t\t\t");\n");
printf("\t\t\t_____ \n");
printf("\t\t\t ____ / _____ / | _____ \n");
printf("\t\t\t / | || / | \n");
printf("\t\t\t / | _____ | / / | \n");
}
```

```
void menu4(){  
  
    system("cls");  
  
    printf("\t\t\t _____ \n");  
    printf("\t\t\t / _____ /| \n");  
    printf("\t\t\t ____ | \n");  
    printf("\t\t\t || \n");  
    printf("\t\t\t / | \n");  
    printf("\t\t\t || /|\n");  
  
    printf("\t\t\t | _____ | / \n");  
}
```

```
void menu5(){

    system("cls");

    time_t s, val = 1;

    struct tm* current_time;

    s = time(NULL);

    current_time = localtime(&s);

    printf("\t\t\t _____ \n");
    printf("\t\t\t / _____ / | \n");
    printf("\t\t\t ____ | \n");
    printf("\t\t\t / | %02d:%02d:%02d \n");
    printf("/ | \n",current_time->tm_hour,current_time->tm_min,current_time->tm_sec);

    printf("\t\t\t / | _____ | / \n");
}

}
```

```
void end1(){
    system("cls");
    menu5();
    printf("\t\t\t/ |\n");
    printf("\t\t\t| |\n");
    printf("\t\t\t-----| |\n");
    printf("\t\t\t| Thank You | |\n");
    printf("\t\t\t-----| |\n");
    printf("\t\t\t-----| |\n");
    printf("\t\t\t| Stay | |\n");
    printf("\t\t\t| Safe | |\n");
    printf("\t\t\t| Stay | |\n");
    printf("\t\t\t| Stay | |\n");
    printf("\t\t\t| Happy | |\n");
    printf("\t\t\t| | /\n");
    printf("\t\t\t|-----| |\n");
    printf("\t\t\t|-----| |\n");Sleep(2000);
}
```

```
void end2(){
    system("cls");
    menu4();
    printf("\t\t\t/ |\n");
    printf("\t\t\t| |\n");
}
```

```
void end3(){  
  
    system("cls");  
  
    menu3();  
  
    printf("\t\t\t/ _____ / |\n");  
  
    printf("\t\t\t| |\n");  
  
    printf("\t\t\t| _____ | |\n");  
  
    printf("\t\t\t| -----| |\n");  
  
    printf("\t\t\t| Goo | |\n");  
  
    printf("\t\t\t| -----| |\n");  
  
    printf("\t\t\t| _____ | |\n");  
  
    printf("\t\t\t| |\n");
```

```

PlaySound(TEXT("thanks.wav"),NULL,SND_ASYNC);

printf("\t\t\t|      | |\n");
printf("\t\t\t| Specially Thanks to | |\n");
printf("\t\t\t|      | |\n");
printf("\t\t\t| _____| |\n");
printf("\t\t\t|_____| |\n");Sleep(1000);
}


```

```

void end4(){

system("cls");

menu2();

printf("\t\t\t/ |\n");
printf("\t\t\t| |\n");
printf("\t\t\t| |\n");
printf("\t\t\t-----| |\n");
printf("\t\t\tGood | |\n");
printf("\t\t\t-----| |\n");
printf("\t\t\t| |\n");
printf("\t\t\t| |\n");
printf("\t\t\t| Specially Thanks to | |\n");
printf("\t\t\t| |\n");

```

```
printf("\t\t\t|      Our      |    | |\n");
printf("\t\t\t|              |    | |\n");
printf("\t\t\t| _____|    | |\n");
printf("\t\t\t|_____| /|\n");Sleep(1000);
}
```

```
void end5(){
system("cls");
printf("\t\t\t\n");
printf("\t\t\t\n");
printf("\t\t\t _____ \n");
printf("\t\t\t / _____ /|\n");
printf("\t\t\t / (_____) / |\n");
printf("\t\t\t / _____ / |\n");
printf("\t\t\t|    | |\n");
printf("\t\t\t| _____ |    | |\n");
printf("\t\t\t|-----|    | |\n");
printf("\t\t\t|    Good Bye    |    | |\n");
printf("\t\t\t|-----|    | |\n");
printf("\t\t\t| _____ |    | |\n");
printf("\t\t\t|    |    | |\n");
printf("\t\t\t|    |    | |\n");
printf("\t\t\t|    Specially Thanks to    |    | |\n");
printf("\t\t\t|    |    | |\n");
printf("\t\t\t|    Our    |    | |\n");
```

```

printf("\t\t\t|      |  |\n");
printf("\t\t\t|      |  |\n");
printf("\t\t\t|  AHMED WASIF REZA  |  |\n");
printf("\t\t\t|      |  |\n");
printf("\t\t\tSir      |  |\n");
printf("\t\t\t| _____|  |\n");
printf("\t\t\t|_____|  |\n");
}

void MainMenu(){

menu1();

menu2();menu_body();

menu3();menu_body();

menu4();menu_body();

menu5();menu_body();

}

void Ending(){

end1();

end2();

end3();

end4();

end5();

}

void menuUpper(){

time_t s, val = 1;

struct tm* current_time;

s = time(NULL);

current_time = localtime(&s);

printf("\t\t\t| _____| \n");Sleep(35);

printf("\t\t\t| /_____| |\n");Sleep(35);

printf("\t\t\t| ____| ||_____\n");Sleep(35);

```

```

printf("\t\t\t / | %02d:%02d:%02d ||\n",current_time->tm_hour,current_time->tm_min,current_time->tm_sec);Sleep(35);

printf("\t\t\t / _____| / / |\n");Sleep(35);

printf("\t\t\t/_____ / |\n");Sleep(35);

printf("\t\t\t| | |\n");Sleep(35);

printf("\t\t\t|-----| | |\n");Sleep(35);

}

void menuLower(){

printf("\t\t\t|-----| / |\n");Sleep(35);

printf("\t\t\t| / |\n");Sleep(35);

printf("\t\t\t/_____| / \n");Sleep(35);

}

void HoldMenu(){

system("cls");

time_t s, val = 1;

struct tm* current_time;

s = time(NULL);

current_time = localtime(&s);

printf("\t\t\t _____ \n");

printf("\t\t\t /_____| / \n");

printf("\t\t\t ____| ____||_____\n");

printf("\t\t\t / | %02d:%02d:%02d ||\n",current_time->tm_hour,current_time->tm_min,current_time->tm_sec);

printf("\t\t\t / _____| / / |\n");

printf("\t\t\t/_____ / |\n");

printf("\t\t\t| | |\n");

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

printf("\t\t\t| Digital Phonebook | | |\n");

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

```

```

printf("\t\t\t| |\n");
printf("\t\t\t| press the number to get access | |\n");
printf("\t\t\t| |\n");
printf("\t\t\t| _____ | |\n");
printf("\t\t\t| | | |\n");
printf("\t\t\t| 1. Add contact | | |\n");
printf("\t\t\t| 2. Edit contact | | |\n");
printf("\t\t\t| 3. Search contact | | |\n");
printf("\t\t\t| 4. Remove contact | | |\n");
printf("\t\t\t| 5. Block contact | | |\n");
printf("\t\t\t| 6. View Blocked contact | | |\n");
printf("\t\t\t| 7. Unblock contact | | |\n");
printf("\t\t\t| 8. View All contact | | |\n");
printf("\t\t\t| 9. Exit | | |\n");
printf("\t\t\t| 10. About Phonebook | | |\n");
printf("\t\t\t| _____ | |\n");
printf("\t\t\t| |\n");
}

void Loading(){

printf("\n\t\t\tLoading .");Sleep(500);

printf(" .");Sleep(500);printf(" .");Sleep(500);

printf(" .");Sleep(500);printf(" .");Sleep(500);

PlaySound(TEXT("updatesuccessfully.wav"),NULL,SND_ASYNC);

printf("\n\t\t\tUpdate Successfully");Sleep(2500);

}

void Back(){

printf("\n\t\t\t| |\n");Sleep(20);

printf("\t\t\t| | |\n");Sleep(20);

printf("\t\t\t| Press any key to go back | |\n");Sleep(20);

printf("\t\t\t| to the main menu | |\n");Sleep(20);
}

```

```
printf("\t\t\t|_____|_____|____|\n");Sleep(20);
}

void AddContact(){

system("color 0E");

FILE *fp;

fp=fopen("phonebook.txt","a+");

system("cls");

menuUpper();

printf("\t\t\t| Add Contact | |\n");Sleep(35);

menuLower();

printf("\n\t\t\t");

char name[50];

printf("Enter name: ");

scanf("%s",name);

while(1{

int CountName=0;

for(int i=0;(name[i]>='A'&&name[i]<='Z')||(name[i]>='a'&&name[i]<='z')||name[i]=='_';i++){

CountName++;

}

if(CountName==strlen(name))

break;

else{

PlaySound(TEXT("error.wav"),NULL,SND_ASYNC);

printf("\t\t\t Invalid name\n\n\t\t\t Enter again: ");

scanf("%s",name);

}

}

char num[20];

printf("\n\t\t\t");

printf("Enter Number: ");
```

```

scanf("%s",num);

while(1){

if((num[0]=='0'&&num[1]=='1')&&(num[2]=='3' | | num[2]=='5' | | num[2]=='6' | | num[2]=='7' | | num[2]=='8' | | num[2]
=='9')

&&(strlen(num)==11))

break;

else{

PlaySound(TEXT("error.wav"),NULL,SND_ASYNC);

printf("\t\t\t Invalid number\n\n\t\t\t Enter again: ");

scanf("%s",num);

}

}

char mail[50];

printf("Press 's' to skip this step!");

printf("\n\t\t");

printf("Enter mail: ");

scanf("%s",mail);

if(strlen(mail)==1&&(mail[0]=='S' | | mail[0]=='s'))

printf("Skipped this step!\n");

else{

while(1){

int CountMail=0;

for(int
i=0;(mail[i]>='a'&&mail[i]<='z')| |(mail[i]>='0'&&mail[i]<='9')| |mail[i]== '@'| |mail[i]== '.'| |mail[i]== '-'| |mail[i]== '_
;i++){


CountMail++;

}

int L=strlen(mail);

if((CountMail==L)&&(mail[L-4]=='.')&&((mail[L-3]=='c'&&mail[L-2]=='o'&&mail[L-1]=='m')| |(mail[L-3]=='e'&&mail[
L-2]=='d'&&mail[L-1]=='u')))

break;
}
}

```

```

else{
    PlaySound(TEXT("error.wav"),NULL,SND_ASYNC);

    printf("\t\t\t Invalid Mail\n\n\t\t\t Enter again: ");

    scanf("%s",mail);

}

}

char address[50];

printf("Press 's' to skip this step!");

printf("\n\t\t\t");

printf("Enter address: ");

scanf("%s",address);

if(strlen(address)==1&&(address[0]=='S'||address[0]=='s'))

    printf("Skipped this step!\n");

else{

    while(1){

        int CountAddress=0;

        for(int
i=0;(address[i]>='A'&&address[i]<='Z')||((address[i]>='a'&&address[i]<='z')||address[i]==','||address[i]=='_'||(address[i]>='0'&&address[i]<='9');i++){

            CountAddress++;

        }

        if(CountAddress==strlen(address))

            break;

    else{

        PlaySound(TEXT("error.wav"),NULL,SND_ASYNC);

        printf("\t\t\t Invalid Address\n\n\t\t\t Enter again: ");

        scanf("%s",address);

    }

}

}

```

```

char department[20];

printf("Press 's' to skip this step!");

printf("\n\t\t");

printf("Enter department: ");

scanf("%s",department);

if(strlen(department)==1&&(department[0]=='S' | | department[0]=='s'))

    printf("Skipped this step!\n");

else{

    while(1){

        int CountDepartment=0;

        for(int

i=0;(department[i]>='A'&&department[i]<='Z')| |(department[i]>='a'&&department[i]<='z')| |department[i]=='_';i+ +){

            CountDepartment++;

        }

        if(CountDepartment==strlen(department))

            break;

        else{

            PlaySound(TEXT("error.wav"),NULL,SND_ASYNC);

            printf("\t\t\t Invalid Department\n\n\t\t\t Enter again: ");

            scanf("%s",department);

        }

    }

}

fprintf(fp,"%s %s %s %s %s\n",name,num,mail,address,department);

fclose(fp);

Loading();

HoldMenu();Option();

}

void SearchContact(){

system("cls");

```

```

system("color 05");

menuUpper();

printf("\t\t\t|    Search Contact    |    |\n");Sleep(35);

menuLower();

printf("\n");

char target[50];

int flag=0;

printf("\t\t\t press s to skip !\n");

printf("\t\t\t Enter name or number: ");

scanf("%s",target);

if(strlen(target)==1&&(target[0]=='S' || target[0]=='s')){

    Loading();Back();

    printf("\t\t\t      ");

    getch();

    HoldMenu();Option();

}

else{

    while(1){

        if((target[0]=='0'&&target[1]=='1')&&(target[2]=='3' || target[2]=='5' || target[2]=='6' || target[2]=='7' || target[2]=='8' || target[2]=='9')

        &&(strlen(target)==11)) {

            FILE *fp;

            fp=fopen("phonebook.txt","r");

            char name[50];

            char num[20];

            char mail[50];

            char address[50];

            char department[20];

            while(fscanf(fp,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

                if(strcmp(target,num)==0){


```

```

PlaySound(TEXT("contact_found.wav"),NULL,SND_ASYNC);

printf("\n\t\t\t\t Contact has found\n\n");

printf("\n\t\t\t| Name : %s\n",name);Sleep(20);

printf("\t\t\t| Number : %s\n",num);Sleep(20);

printf("\t\t\t| Mail : %s\n",mail);Sleep(20);

printf("\t\t\t| Address : %s\n",address);Sleep(20);

printf("\t\t\t| Department: %s\n\n",department);Sleep(20);

flag++;

break;

}

}

fclose(fp);

}

else{

FILE *fp;

fp=fopen("phonebook.txt","r");

char name[50];

char num[20];

char mail[50];

char address[50];

char department[20];

while(fscanf(fp,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

if(strcmp(target,name)==0){

PlaySound(TEXT("contact_found.wav"),NULL,SND_ASYNC);

printf("\n\t\t\t\t Contact has found\n\n");

printf("\n\t\t\t| Name : %s\n",name);Sleep(20);

printf("\t\t\t| Number : %s\n",num);Sleep(20);

printf("\t\t\t| Mail : %s\n",mail);Sleep(20);

printf("\t\t\t| Address : %s\n",address);Sleep(20);
}
}
}

```



```
break;

}

}

}

}

void RemoveContact(){

system("cls");

system("color 0C");

menuUpper();

printf("\t\t\t| Remove Contact | |\n");Sleep(35);

menuLower();

printf("\n");

char target[50];

int flag=0;

printf("\n\t\t\t Enter name or number: ");

scanf("%s",target);

if((target[0]=='0'&&target[1]=='1')&&(target[2]=='3'||target[2]=='5'||target[2]=='6'||target[2]=='7'||target[2]=='8'||target[2]=='9')

&&(strlen(target)==11)) {

FILE *fp,*fp1;

fp=fopen("phonebook.txt","r");

fp1=fopen("temp.txt","w");

char name[50];

char num[20];

char mail[50];

char address[50];

char department[20];

while(fscanf(fp,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

if(strcmp(num,target)==0){

flag++;
```

```
    continue;

}

fprintf(fp1,"%s %s %s %s %s\n",name,num,mail,address,department);

}

fclose(fp);

fclose(fp1);

fp=fopen("phonebook.txt","w");

fp1=fopen("temp.txt","r");

while(fscanf(fp1,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

    fprintf(fp,"%s %s %s %s %s\n",name,num,mail,address,department);

}

fclose(fp);

fclose(fp1);

remove("temp.txt");

flag++;

}

else{

FILE *fp,*fp1;

fp=fopen("phonebook.txt","r");

fp1=fopen("temp.txt","w");

char name[50];

char num[20];

char mail[50];

char address[50];

char department[20];

while(fscanf(fp,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

    if(strcmp(name,target)==0){

        flag++;

        continue;

    }

}
```





```
char num[20];
char mail[50];
char address[50];
char department[20];

while(fscanf(fp,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

    if(strcmp(num,target)==0){

        fprintf(fp1,"%s %s %s %s %s\n",name,num,mail,address,department);

        flag++;

    }

    else{

        fprintf(fp2,"%s %s %s %s %s\n",name,num,mail,address,department);

    }

}

fclose(fp);

fclose(fp1);

fclose(fp2);

fp=fopen("phonebook.txt","w");

fp2=fopen("temp.txt","r");

while(fscanf(fp2,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

    fprintf(fp,"%s %s %s %s %s\n",name,num,mail,address,department);

}

fclose(fp);

fclose(fp2);

remove("temp.txt");

}

else{

FILE *fp,*fp1,*fp2;

fp=fopen("phonebook.txt","r");

fp1=fopen("phonebook_block.txt","a+");

fp2=fopen("temp.txt","w");
}
```

```
char name[50];
char num[20];
char mail[50];
char address[50];
char department[20];

while(fscanf(fp,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

    if(strcmp(name,target)==0){

        fprintf(fp1,"%s %s %s %s %s\n",name,num,mail,address,department);

        flag++;

    }

    else{

        fprintf(fp2,"%s %s %s %s %s\n",name,num,mail,address,department);

    }

}

fclose(fp);

fclose(fp1);

fclose(fp2);

fp=fopen("phonebook.txt","w");

fp2=fopen("temp.txt","r");

while(fscanf(fp2,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

    fprintf(fp,"%s %s %s %s %s\n",name,num,mail,address,department);

}

fclose(fp);

fclose(fp2);

remove("temp.txt");

}

if(flag==0){

PlaySound(TEXT("nothing_found.wav"),NULL,SND_ASYNC);

printf("\n\t\t\t Nothing Found\n");

printf("\n\t\t\tPress 1 to search again or others to stop\n");
}
```

```

int again;

printf("\t\t\t");

scanf("%d",&again);

if(again==1){

    BlockContact();

}

else{

    Loading();Back();

    printf("\t\t\t");

    getch();

    HoldMenu();Option();

}

}

else{

    PlaySound(TEXT("block.wav"),NULL,SND_ASYNC);

    printf("\n\t\t\t Contact has found\n");

    printf("\n\t\t\t Loading .");Sleep(500);

                                printf(" .");Sleep(500);printf("

.");Sleep(500);

                                printf(" .");Sleep(500);printf("

.");Sleep(500);

    printf("\n\n\t\t\t Update

Successfully");Sleep(2500);

    Back();

    printf("\t\t\t");

    getch();

    HoldMenu();Option();

}

}

void ViewBlockedContact(){

system("cls");

```

```
system("color 0D");

menuUpper();

printf("\t\t\t|   View Blocked Contact   |   |\n");Sleep(35);

menuLower();

printf("\n\n");

FILE *fp;

fp=fopen("phonebook_block.txt","r");

char name[50];

char num[20];

char mail[50];

char address[50];

char department[20];

while(fscanf(fp,"%s %s %s %s",name,num,mail,address,department)!=EOF){

    printf("\t\t\t| Name : %s\n",name);Sleep(20);

    printf("\t\t\t| Number : %s\n",num);Sleep(20);

    printf("\t\t\t| Mail : %s\n",mail);Sleep(20);

    printf("\t\t\t| Address : %s\n",address);Sleep(20);

    printf("\t\t\t| Department: %s\n\n",department);Sleep(20);

}

fclose(fp);

Back();

printf("\t\t\t      ");

getch();

Loading();

HoldMenu();Option();

}

void UnblockContact(){

system("color 09");

system("cls");

menuUpper();
```

```
printf("\t\t\t|    Unblock Contact    | |\n");Sleep(35);

menuLower();

printf("\n");

char target[50];

int flag=0;

printf("\t\t\t Enter name or number: ");

scanf("%s",target);

if((target[0]=='0'&&target[1]=='1')&&(target[2]=='3'||target[2]=='5'||target[2]=='6'||target[2]=='7'||target[2]=='8'||target[2]=='9')

&&(strlen(target)==11)) {

FILE *fp,*fp1,*fp2;

fp=fopen("phonebook.txt","a");

fp1=fopen("phonebook_block.txt","r");

fp2=fopen("temp.txt","w");

char name[50];

char num[20];

char mail[50];

char address[50];

char department[20];

while(fscanf(fp1,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

if(strcmp(num,target)==0){

fprintf(fp,"%s %s %s %s %s\n",name,num,mail,address,department);

flag++;

}

else{

fprintf(fp2,"%s %s %s %s %s\n",name,num,mail,address,department);

}

}

fclose(fp);

fclose(fp1);
```

```
fclose(fp2);

fp1=fopen("phonebook_block.txt","w");

fp2=fopen("temp.txt","r");

while(fscanf(fp2,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

    fprintf(fp1,"%s %s %s %s %s\n",name,num,mail,address,department);

}

fclose(fp1);

fclose(fp2);

remove("temp.txt");

}

else{

FILE *fp,*fp1,*fp2;

fp=fopen("phonebook.txt","a");

fp1=fopen("phonebook_block.txt","r");

fp2=fopen("temp.txt","w");

char name[50];

char num[20];

char mail[50];

char address[50];

char department[20];

while(fscanf(fp1,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

    if(strcmp(name,target)==0){

        fprintf(fp,"%s %s %s %s %s\n",name,num,mail,address,department);

        flag++;

    }

    else{

        fprintf(fp2,"%s %s %s %s %s\n",name,num,mail,address,department);

    }

}

fclose(fp);
```





```

for(int i=0;i<c;i++){
    for(int j = i+1; j <c; j++){
        if(strcmp(str[i],str[j])> 0){

            char hold[100];

            strcpy(hold, str[i]);

            strcpy(str[i], str[j]);

            strcpy(str[j], hold);

        }
    }
}

fp1=fopen("phonebook.txt","r");

int i=0;

while(fscanf(fp1,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

fp2=fopen("phonebook.txt","r");

while(fscanf(fp2,"%s %s %s %s %s",name,num,mail,address,department)!=EOF){

    if(strcmp(str[i],name)==0){

        printf("\t\t\t Contact no: %d\n",i+1);

        printf("\t\t\t| Name : %s\n",name);Sleep(20);

        printf("\t\t\t| Number : %s\n",num);Sleep(20);

        printf("\t\t\t| Mail : %s\n",mail);Sleep(20);

        printf("\t\t\t| Address : %s\n",address);Sleep(20);

        printf("\t\t\t| Department: %s\n\n",department);Sleep(20);

        i++;

        break;

    }

}

fclose(fp);

printf("\n\t\t\t Total contact= %d",i);

```

```
Back();  
printf("\t\t\t");  
getch();  
Loading();  
HoldMenu();Option();  
}  
  
void Option(){  
int select;  
printf("\t\t\t");  
scanf("%d",&select);  
switch(select){  
case 1: AddContact(); break;  
case 2: EditContact(); break;  
case 3: SearchContact(); break;  
case 4: RemoveContact(); break;  
case 5: BlockContact(); break;  
case 6: ViewBlockedContact(); break;  
case 7: UnblockContact(); break;  
case 8: ViewAllContact(); break;  
case 9: HoldMenu();  
printf("\n\t\t\t Loading .");Sleep(500);  
printf(" .");Sleep(500);printf(" .");Sleep(500);  
printf(" .");Sleep(500);printf(" .");Sleep(500);  
printf("\n\n\t\t\t Update Successfully");Sleep(2500);  
PlaySound(TEXT("exit.wav"),NULL,SND_ASYNC);  
Ending();Sleep(2000);  
exit(0);  
case 10: About(); break;  
case 999: Secret(); break;  
default: HoldMenu();Option();
```

```
}

int main(){
    system("color 0A");
    PlaySound(TEXT("welcome.wav"),NULL,SND_ASYNC);
    MainMenu();
    Option();
}
```