NEW HORIZON COLLEGE OF ENGINEERING

A MINI PROJECT

REPORT

for
MINI PROJECT IN C (19CSE39)

CRIMINAL DATABASE(CD)

submitted by

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1NH19CS146
SEM-3rd/C

In partial fulfillment for the award of

the degree of

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING

NEW HORIZON COLLEGE OF ENGINEERING

Certificate

This is to certify that the mini project work titled

CRIMINAL DATABASE

Submitted in partial fulfillment of the degree of Bachelor of Engineering in Computer Science and Engineering

Submitted by

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DURING

ODD SEMESTER 2020-2021

For

19CSE39

Signature of Reviewer

Signature of HOD

SEMESTER END EXAMINATION

Name of the Examiner	*Signature with date*
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CRIMINAL DATABASE

ORIGINALITY REPORT

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SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Marcel Weiher, Robert Hirschfeld. "Standard object out: streaming objects with polymorphic write streams", Proceedings of the 15th ACM SIGPLAN International Symposium on Dynamic Languages, 2019 Publication	<1%

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ABSTRACT

'Criminal Database' Basically Stores the Criminal Records and we can Search the Criminal Record of any Criminal with any kind of data Like First Name, Convicts Code, Eye colour, Hair Colour, Date of Arrest, FIR Number etc. As we are all are familiar About the Physical Criminal Records Which are Stored in paper only. The project Can made Easy to Input Crime Records, Delete, Update Records and Search by any Data. It is helpful for The Crime Bureau administrator. Realizing the truth, I got the idea from small Rural Area Police Station where are still doing paperwork in their Police station. The main motto of this project is to end the paper working and helping us to manage the criminal record history. I have done this project with an easy solution that we can easily feed the information of criminal and search by any data/clue that we have like First Name, Convicts Code, Eye colour, Hair Colour, Date of Arrest, FIR Number etc. This project will be helpful for the Crime Bureau administrator as well as Police department to manage and Search records Easily.

ACKNOWLEDGEMENT

The satisfaction and euphoria that accompany the successful completion of any task would be impossible without the mention of the people who made it possible, whose constant guidance and encouragement crowned our efforts with success.

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CHAPTER 1

INTRODUCTION

1.1 PROBLEM DEFINITION

In the modern era, with increasing the number of crimes, it is difficult to create and search the records of large number of criminals on paper. When we do not have every information/clue about them then we must search by few information in the previous criminal history. Since everything is getting digitalised, it is better to keep all the records of the criminals safely and securely. Also, if it is available to you on a click, it can save a lot of time. In this software we can input the detail of the multiple convicts/criminals. After that we can also update time by time and when we need it to delete, we can delete it. Main feature of this software is we can search the criminal history of convicts by any information like Convicts Code, First Name, Last Name, Eye colour, Hair Colour, Date of Arrest, Crime, FIR Number etc.

1.2 OBJECTIVES

Objective of the problem for us to manage the criminal record history. I have come up with an easy solution that we can easily feed the information of criminal and search by any data/clue that we have like convict's code, Convict's first name, Convict's last name, Eye colour, Hair Colour, Date of Arrest, Crime, FIR Number etc

The goal of this project is: -

- This project is for to stop the complete paper working done in Crime bureau.
- To provide easy interface for the user to interact with the options available.
- It makes easy work for the officer of crime bureau as well as also for database administrator.
- It helps to create a new file for New Student to save the details in easy way.
- To search the old criminal/convict details.
- To make the search less time consuming.
- It saves the time.

1.3 METHODOLOGY

I have done this project for Criminal Database, but this can be used for other many institution for storing the data of the person related to them.

This software targets all the institution in storing the data of the people who are related to them. So, for the ease the software is separated by different functions which work according to the name given to them. The details are stored in a Linked list node. This software uses linked list to store adjacent vertices. Also, the there is a login system for security. The task will be performed section wise to make the task easier for the user.

1.4 EXPECTED OUTCOME

The outcome is expected to meet the objective. The image to decrease the paper workload for the crime bureau. The crime bureau will be able to do their task very efficiently and fast.

- This project is for to stop the complete paper working done in Crime bureau.
- To provide easy interface for the user to interact with the options available.
- It makes easy work for the officer of crime bureau as well as also for database administrator.
- It helps to create a new file for New Student to save the details in easy way.
- To search the old criminal/convict details.
- To make the search less time consuming.
- It saves the time.

1.5 HARDWARE AND SOFTWARE REQUIREMENTS

Software Requirements: -

-Visual Studio Code + GCC Compiler or Turbo C++ or Code block or CLion

-Windows 7(with .NET Framework 4.5.2) Or later

Hardware Requirements: -

-Processor: 1.3 GHz or Faster

-RAM: 1 GB or More Or later

-Hard disk space: 500MB or More

CHAPTER 2

DATA STRUCTURES

2.1 LINKED LIST

Linked list is a linear data structure which is a collection of different data elements where each element consists of data part and an address part which stores the address of other element. Linked list consists of nodes where each node will be connected or linked to another node through addresses. Memory is allocated to the data elements using Dynamic Memory Allocation i.e. malloc(), calloc(), realloc (). There are mainly four types of linked list like single, double, circular and header linked list.

In C language, linked list is represented using structures which is also called as self-referential structure.

Here in my project, I made utilization of linked list in order to link to create a separate list for a new criminal.

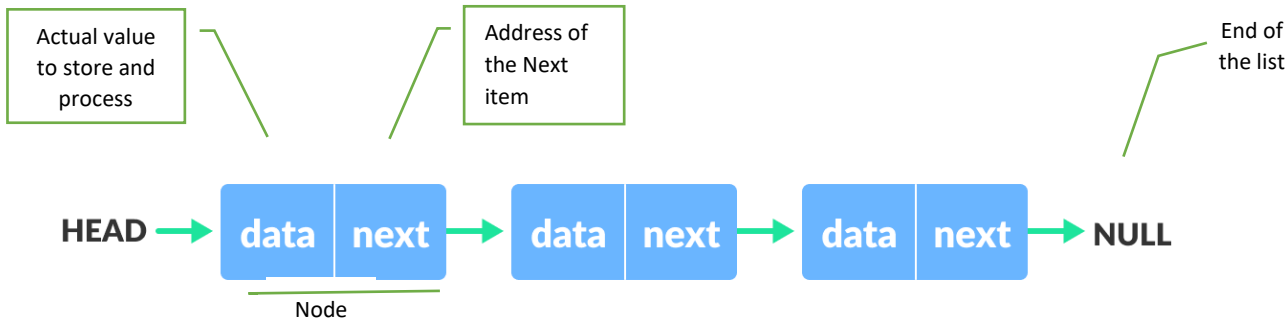

Fig 1. SINGLY LINKED LIST

CHAPTER 3

DESIGN

3.1 DESIGN GOALS

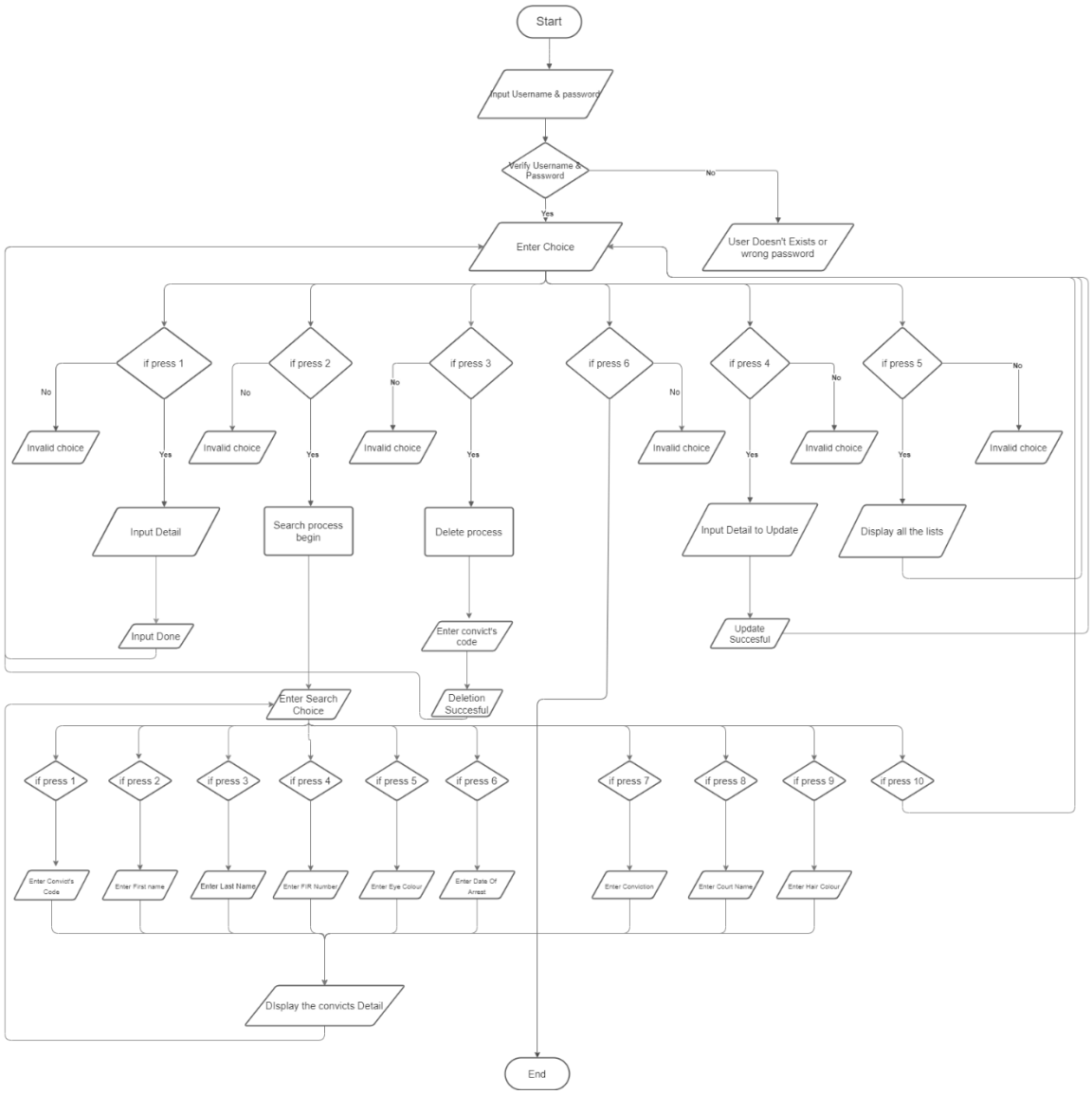

Fig 2. Flowchart

3.2 ALGORITHM

Step 1: Start

Step 2: Enter Username and Password

Step 3: Choose the option available

1. to input Convict details

2.to search for Convict details

3. to delete Convict details

4. to update Convict details

5. to display all Convict details

6. to EXIT

Step 4:

Case 1: if you want Input and store the Criminal Details & it will be stored in database details like Convict Code, Convict First Name, Convict First Name , Age, Gender, Gender, Height, Hair colour , Eye colour , Crime, Face Details, ACT(under which convicted) etc. For updating it is same.

Case 2: Choose the option available

1. Search by Convict Code
2. Search by Convict First Name
3. Search by Convict Last Name
4. Search by FIR Number
5. Search by Eye Colour
6. Search by Date of Arrest
7. Search by Conviction
8. Search by Court Name
9. Search by Hair Colour
10. EXIT Search

For searching, We Can Search by any of this like Convict Code, Convict First Name, Convict Last Name, FIR Number , Eye Colour, Date of Arrest, Conviction, Court Name , Hair Colour etc which will match with the database and if it is there it will show.

Case 3: For Deletion we have enter to Convict Code which will match with the database then Delete the records of Criminal.

Case 4: Updating is like 2nd option. we must enter to Convict Code, which will match with the database and if it is there it will show, and the update option appear.

Case 5: Display is simple, when we choose display.it will Display All the List of Convicts Details

Case 6: if We are Done, we can exit

Step 5: End

CHAPTER 4

IMPLEMENTATION

For this project, I have divided my project into Four different modules.

4.1 MODULE 1 FUNCTIONALITY

It includes the Login page and Detail input of the convicts and Stores it in the data Structure.

And display all the list of convict's Details Entered

Code Snippet

```
#include<stdio.h>

#include<stdlib.h>

#include<string.h>



struct Database {

   int convict_code;

   char fname[100];

   char lname[100];

   int age;

   char gender[10];

   char weight[20];

   char height[30];

   char haircolor[30];
```

```
    char eyecolor[30];
    char crime[100];
    char details[200];
    char court[50];
    char act[40];
    char punishment[80];
    char faddress[100];
    char fir[40];
    char datearr[40];
    struct Database *next;

} *head;

int main() {
    char username[15];
    char password[12]; void display() {
    struct Database *temp = head;
    if (temp == NULL) {
        printf("Unable to fetch,DATABASE is empty!!!");
    } else {

        while (temp != NULL) {
```

```
        printf("   Convict Code: %d\n", temp->convict_code);
        printf("   Convict Name: %s %s\n", temp->fname, temp->lname);
        printf("   Age: %d\n", temp->age);
        printf("   Gender: %s\n", temp->gender);
        printf("   Weight: %s\n", temp->weight);
        printf("   Height: %s\n", temp->height);
        printf("   Hair colour: %s\n", temp->haircolor);
        printf("   Eye colour: %s\n", temp->eyecolor);
        printf("   Convict's Crime: %s\n", temp->crime);
        printf("   Face Details: %s\n", temp->details);
        printf("   Court is: %s\n", temp->court);
        printf("   ACT(under which convicted): %s\n", temp->act);
        printf("   CRIMINAL'S CONVICTION IS: %s\n", temp->punishment);
        printf("   Complete
    head = NULL

    printf("\n  ======================  LOGIN PAGE ======================  \n");

    printf(" \n                  ENTER USERNAME:-");
    scanf("%s", &username);

    printf(" \n                  ENTER PASSWORD:-");
    scanf("%s", &password);
```

```
   if (strcmp(username, "admin") == 0) {
      if (strcmp(password, "Aakash") == 0) {

         printf("  \n\n\n    WELCOME TO CRIMINAL DATABASE(CD) !! YOUR LOGIN IS
SUCCESSFUL");

         printf("\n\n\t====================================\n");
         printf("\t       -CRIMINAL DATABASE-\n");
         printf("\t====================================\n");

         printf("\n\nLOADING");
         for (i = 0; i <= 6; i++) {
            fordelay(100000000);
            printf(". ");
         }
         printf("\n");
         jump:
         printf("\n\n\t::MAIN MENU::\n");

         printf("1. To input Convict details\n2. To search for Convict details\n3. To Delete
Convict details\n4. To update Convict details\n5. Display all Convict details\n6. EXIT");
         do {
```

```
            printf("\n\nEnter Choice: ");



        } while (choice != 0);


    } else {
        printf("\nwrong password");
    }
} else {
    printf("\nUser doesn't exist");
}

return 0;

}
```

4.2 MODULE 2 FUNCTIONALITY

It includes the Searching the details by Convicts Code, First Name, Last Name, Eye colour, Hair Colour, Date of Arrest, FIR Number etc.

and Display all the details.

Code Snippet

```
void search_first_name(char fname[100]) {
   int i;
   printf("\n\nSEARCHING");
   for (i = 0; i <= 6; i++) {
      fordelay(100000000);
      printf(". ");
   }
   struct Database *temp = head;
   while (temp != NULL) {
      if (stricmp(temp->fname, fname) == 0) {
         printf("\n");
         printf("\n----SHOWING THE DETAILS OF CONVICT %s %s----\n", temp->fname,
temp->lname);
         printf("   Convict Code: %d\n", temp->convict_code);
         printf("   Convict Name: %s %s\n", temp->fname, temp->lname);
         printf("   Age: %d\n", temp->age);
         printf("   Gender: %s\n", temp->gender);
```

```
            printf("   Weight: %s\n", temp->weight);
            printf("   Height: %s\n", temp->height);
            printf("   Hair colour: %s\n", temp->haircolor);
            printf("   Eye colour: %s\n", temp->eyecolor);
            printf("   Convict's Crime: %s\n", temp->crime);
            printf("   Face Details: %s\n", temp->details);
            printf("   Court is: %s\n", temp->court);
            printf("   ACT(under which convicted): %s\n", temp->act);
            printf("   PRISONER'S CONVICTION IS Prisoner's Conviction Is: %s\n", temp-
>punishment);
            printf("   Complete Address of Police Station: %s\n", temp->faddress);
            printf("   FIR Number: %s\n", temp->fir);
            printf("   Date of Arrested: %s\n\n", temp->datearr);


            return;
        }
        temp = temp->next;
    }
    printf("\n\nConvict Name with First name: %s :Details not found !!!\n", fname);
}
```

Similarly, I have also implemented Search by Last name, convict's code, Eye Colour, Date of Arrest, Crime, Court Name, Hair Colour and FIR Number etc.

4.3 MODULE 3 FUNCTIONALITY

It includes the Deletion part of the code, where we can delete the Criminal Records by Searching with convict's Code.

Code Snippet

```
void Delete(int convict_code) {


   struct Database *temp1 = head;
   struct Database *temp2 = head;
   while (temp1 != NULL) {


      if (temp1->convict_code == convict_code) {


         printf("Record with Convict Code %d Found !!!\n", convict_code);


         if (temp1 == temp2) {
            head = head->next;
            free(temp1);
         } else {
            temp2->next = temp1->next;
            free(temp1);
         }


         printf("Record Successfully Deleted !!!\n");
```

```
            return;


        }

        temp2 = temp1;

        temp1 = temp1->next;


    }

    printf("Convict Name with Convict Code %d is not found !!!\n", convict_code);


}
```

4.4 MODULE 4 FUNCTIONALITY

It includes the updating part of the Code, where we can Update the Criminal Records by Searching with convict's Code.

Code Snippet

```
void update(int convict_code) {


   struct Database *temp = head;

   while (temp != NULL) {


      if (temp->convict_code == convict_code) {

         printf("----Record with Convict Code %d Found !!!----\n\n", convict_code);

         printf("   Enter new convict First name: ");

         fflush(stdin);

         gets(temp->fname);

         printf("   Enter new convict last name: ");

         fflush(stdin);

         gets(temp->lname);

         printf("   Enter new Convict's Conviction: ");

         fflush(stdin);

         gets(temp->punishment);

         printf("   Enter new age: ");

         scanf("%d", &temp->age);

         printf("   Enter new Gender: ");
```

```
fflush(stdin);

gets(temp->gender);

printf("   Enter new Weight: ");

fflush(stdin);

gets(temp->weight);

printf("   Enter new Height:");

fflush(stdin);

gets(temp->height);

printf("   Enter new Haircolor: ");

fflush(stdin);

gets(temp->haircolor);

printf("   Enter new Eyecolor: ");

fflush(stdin);

gets(temp->eyecolor);

printf("   Enter updation Crime is: ");

fflush(stdin);

gets(temp->crime);

printf("   Enter updation in Face Details: ");

fflush(stdin);

gets(temp->details);

printf("   Enter updatation ofCourt: ");

fflush(stdin);

gets(temp->court);
```

```
            printf("   Enter new ACT(under which convicted):");
            fflush(stdin);
            gets(temp->act);
            printf("   Enter new Convict's Conviction: ");
            fflush(stdin);
            gets(temp->punishment);
            printf("   Enter new Complete Address of Police Station: ");
            fflush(stdin);
            gets(temp->faddress);
            printf("   Enter new FIR Number: ");
            fflush(stdin);
            gets(temp->fir);
            printf("   Enter new Date of Arrest: ");
            fflush(stdin);
            gets(temp->datearr);
            printf("   Updation Successful!!!\n");
            return;
        }
        temp = temp->next;

    }
    printf("Convict Name with Convict Code %d is not found !!!\n", convict_code);
}
```

CHAPTER 5

RESULTS

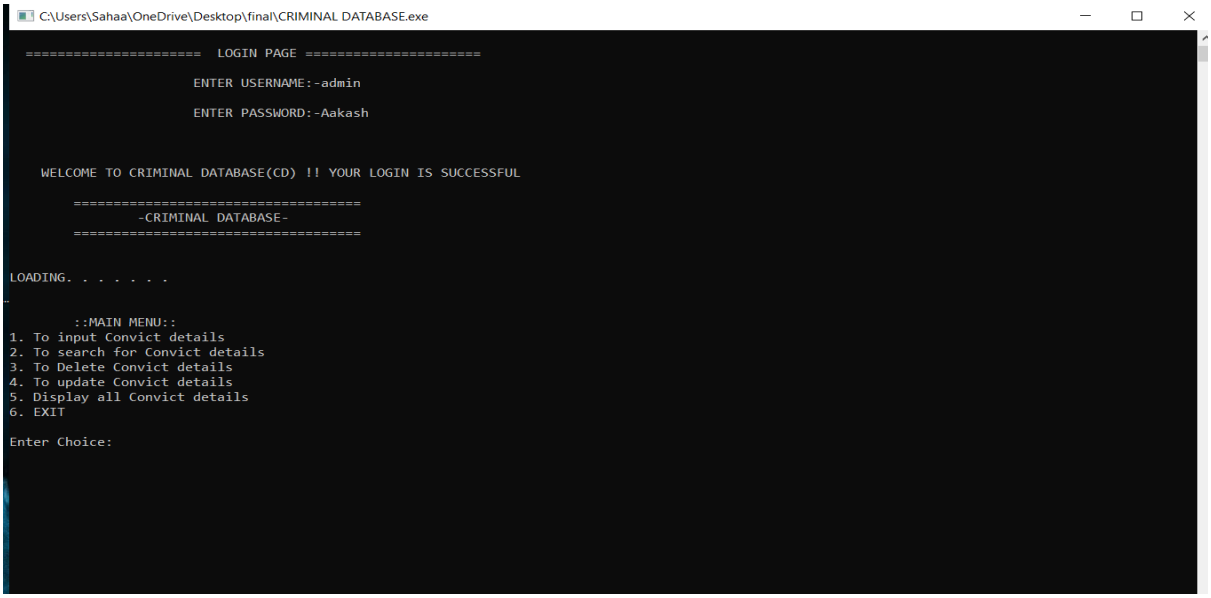

Fig 3. Login page and Main menu

After running the software, we can choose the option for Different Function.

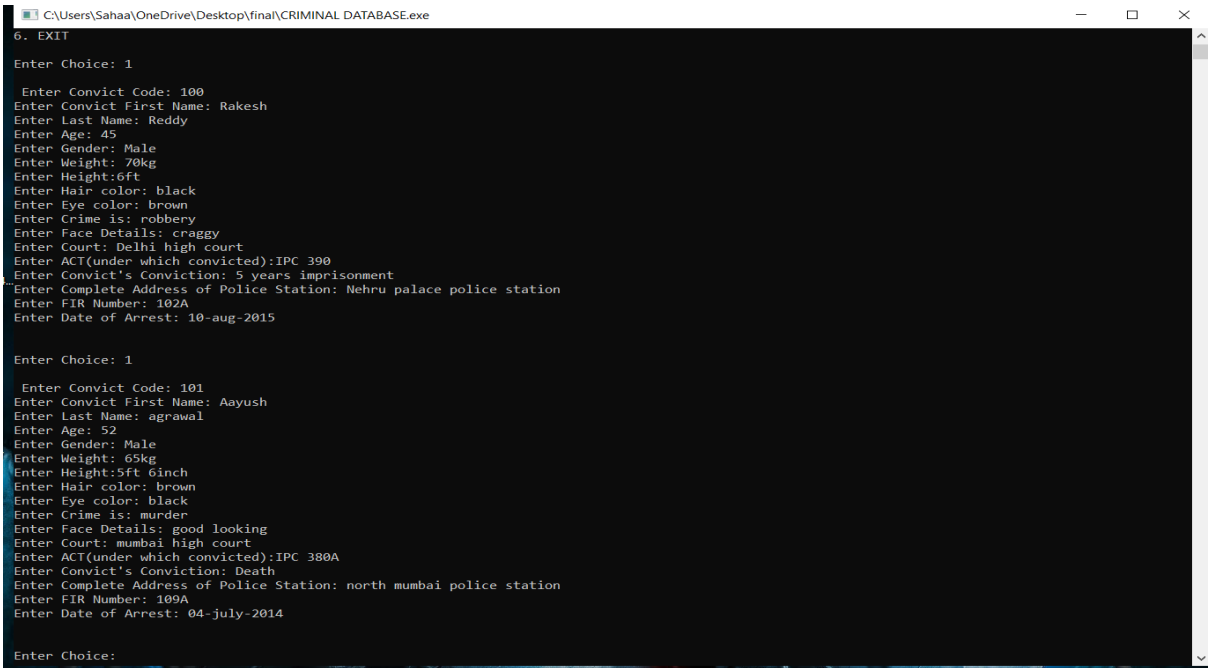

Fig 4. Detail Input

Entering the Details of the Criminal.

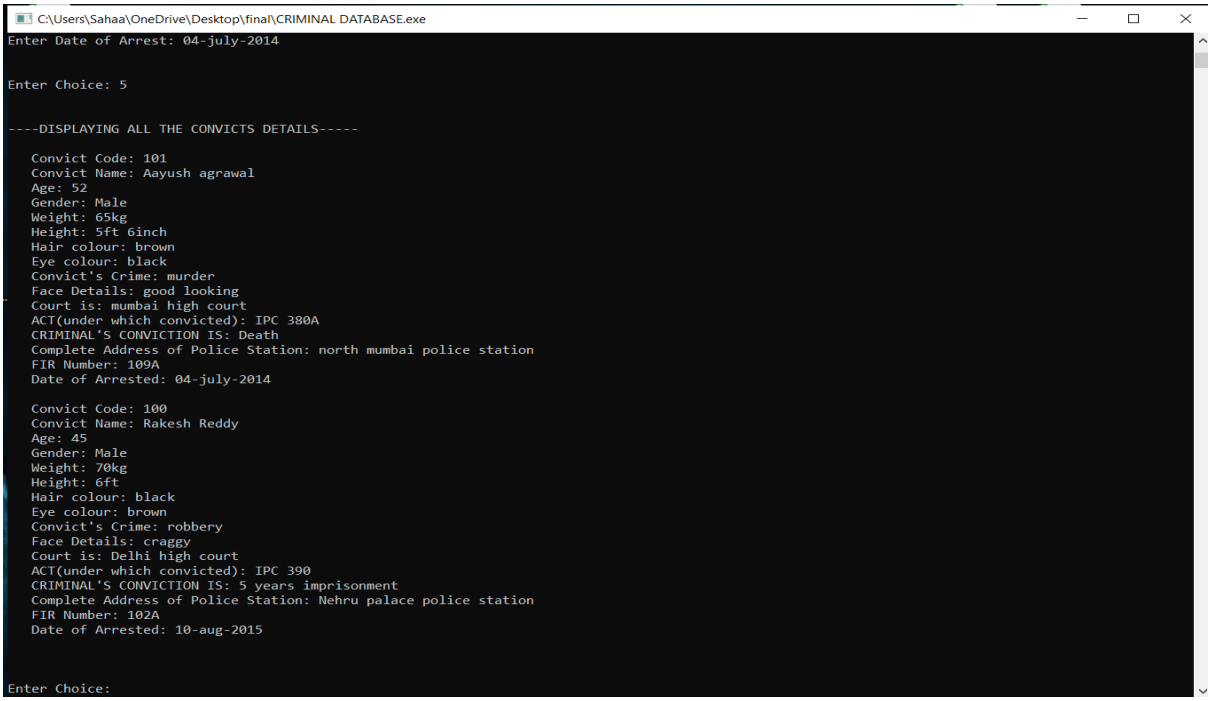

Fig 5. Displaying Details

Displaying All the Criminal Details.

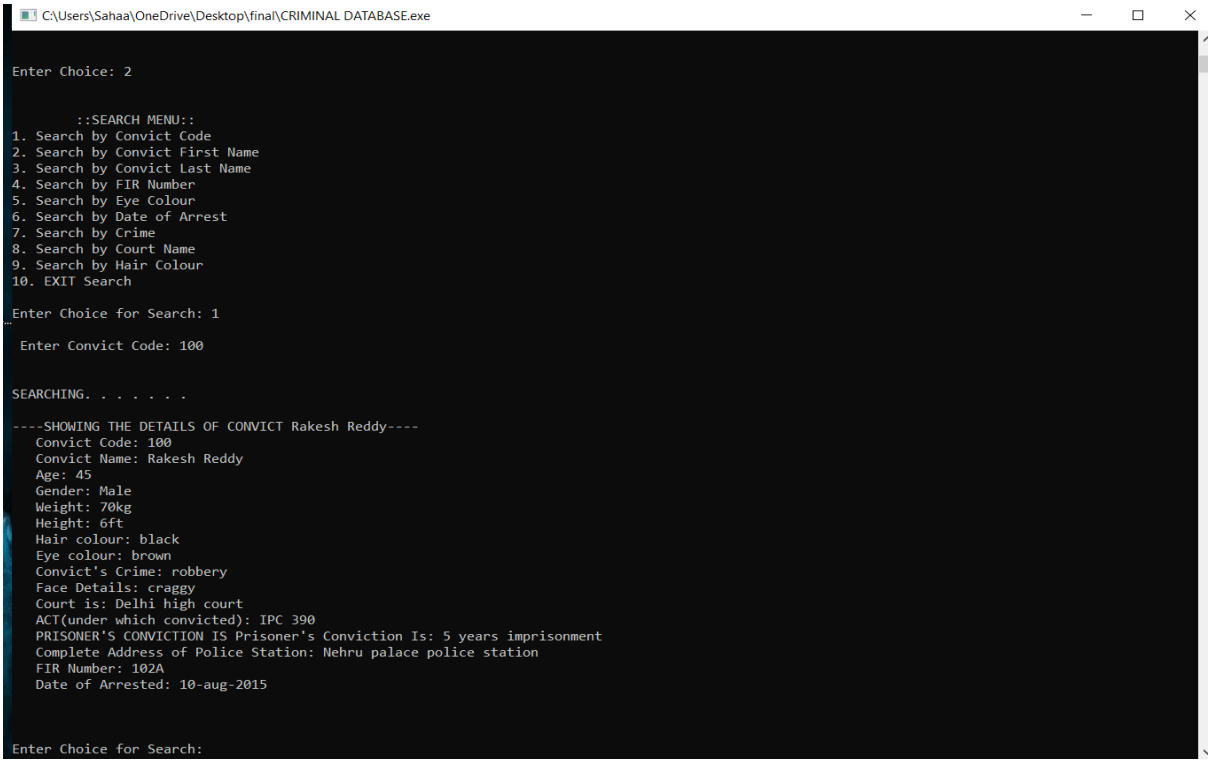

Fig 6. Searching by convict's code

Search menu screen and performing Search by convict's code

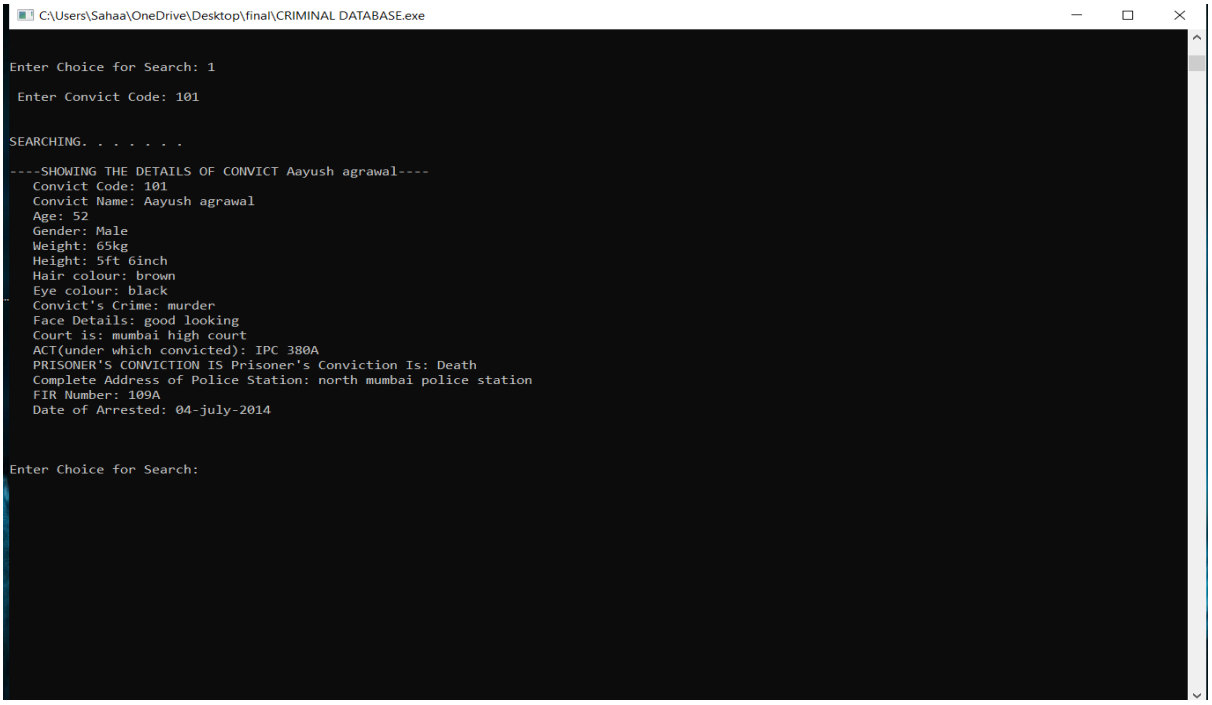

Fig 7. Searching by convict's code

Performing Search by convict's code.

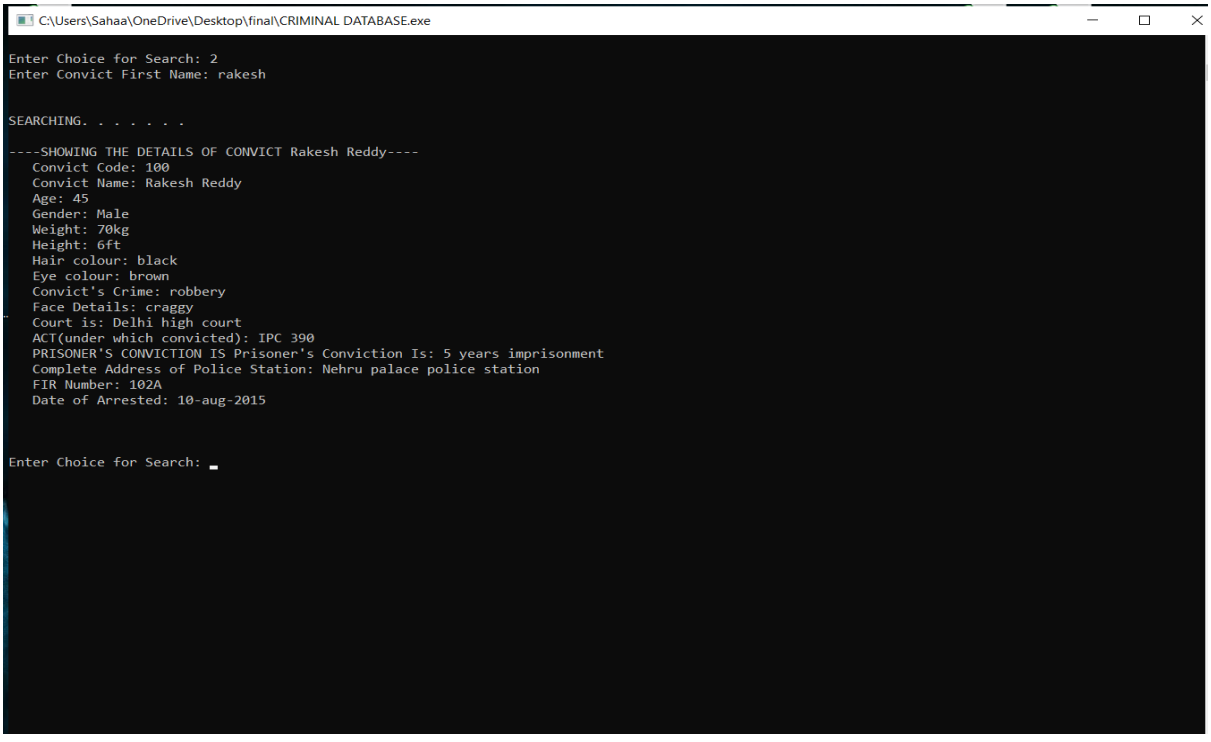

Fig 8. Searching by First Name

Performing Search by First Name.

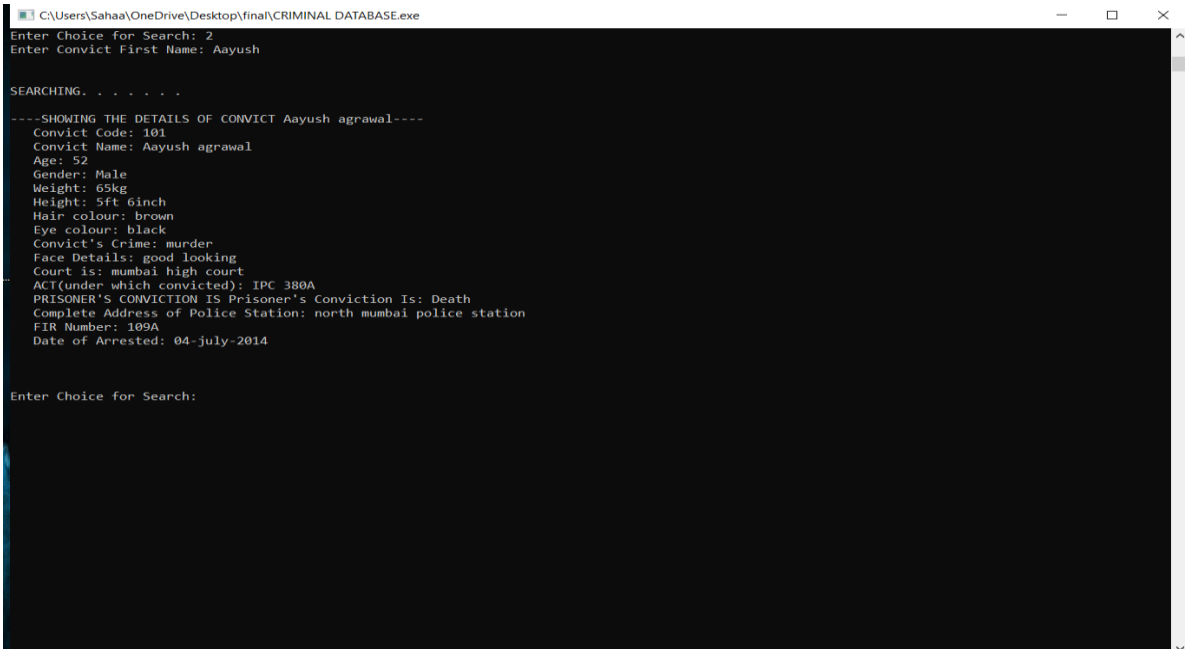

Fig 9. Searching by First Name

Performing Search by First Name.

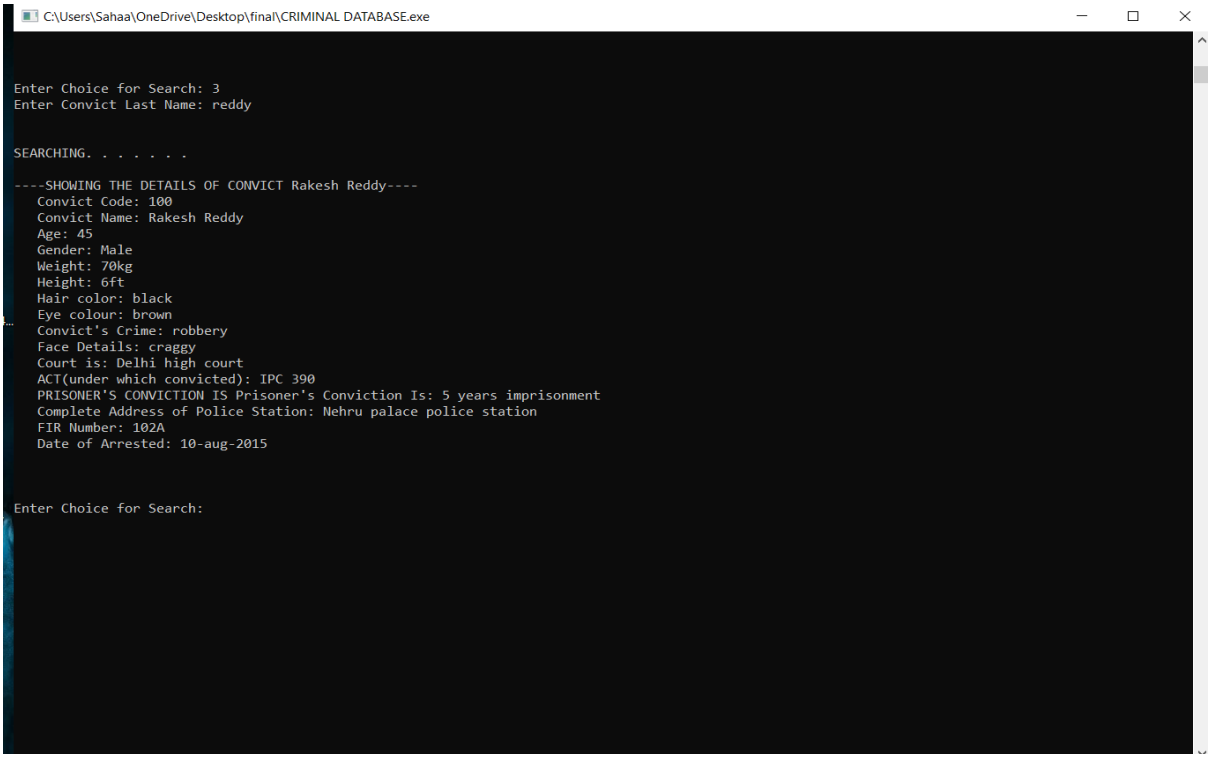

Fig 10. Searching by Last Name

Performing Search by Last Name.

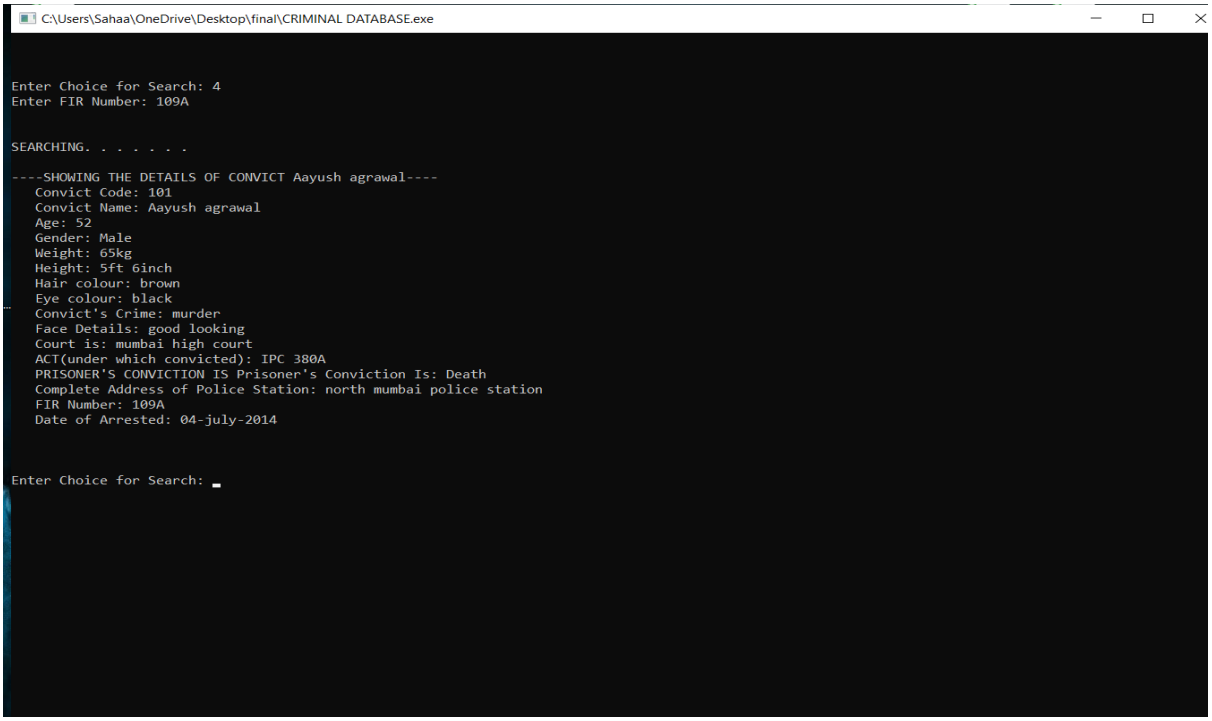

Fig 11. Searching by FIR Number

Performing Search by FIR number.

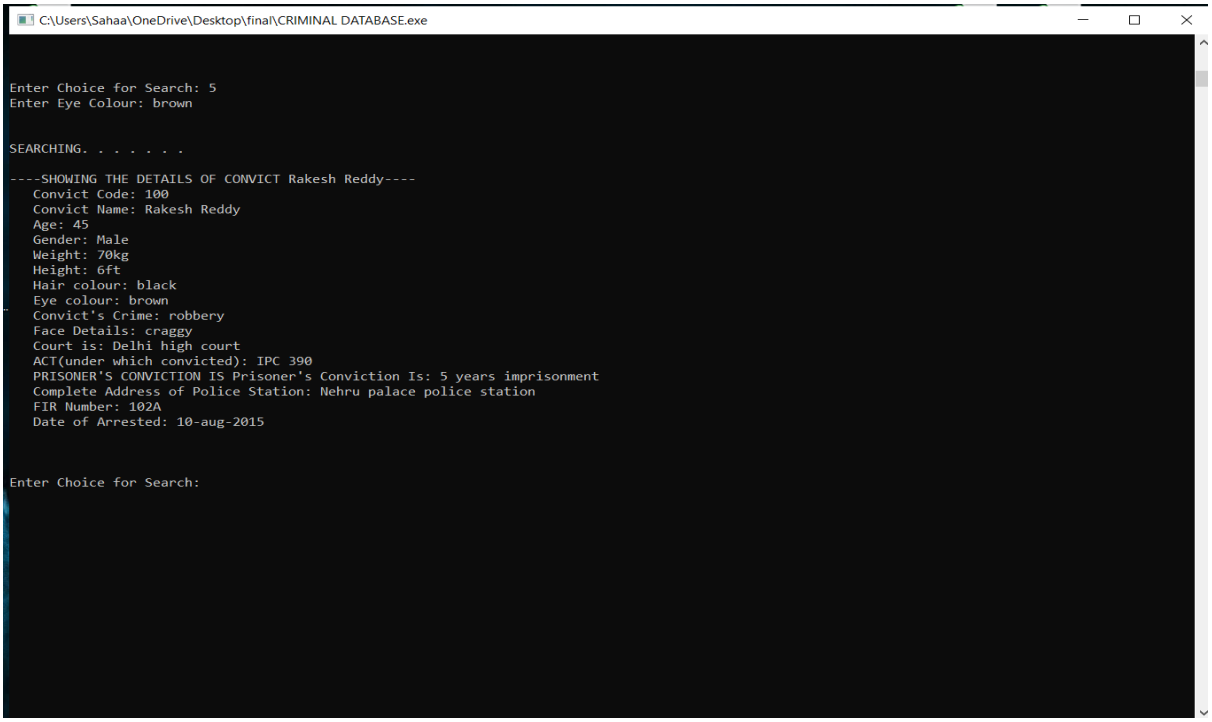

Fig 12. Searching by Eye colour

Performing Search by Eye colour.

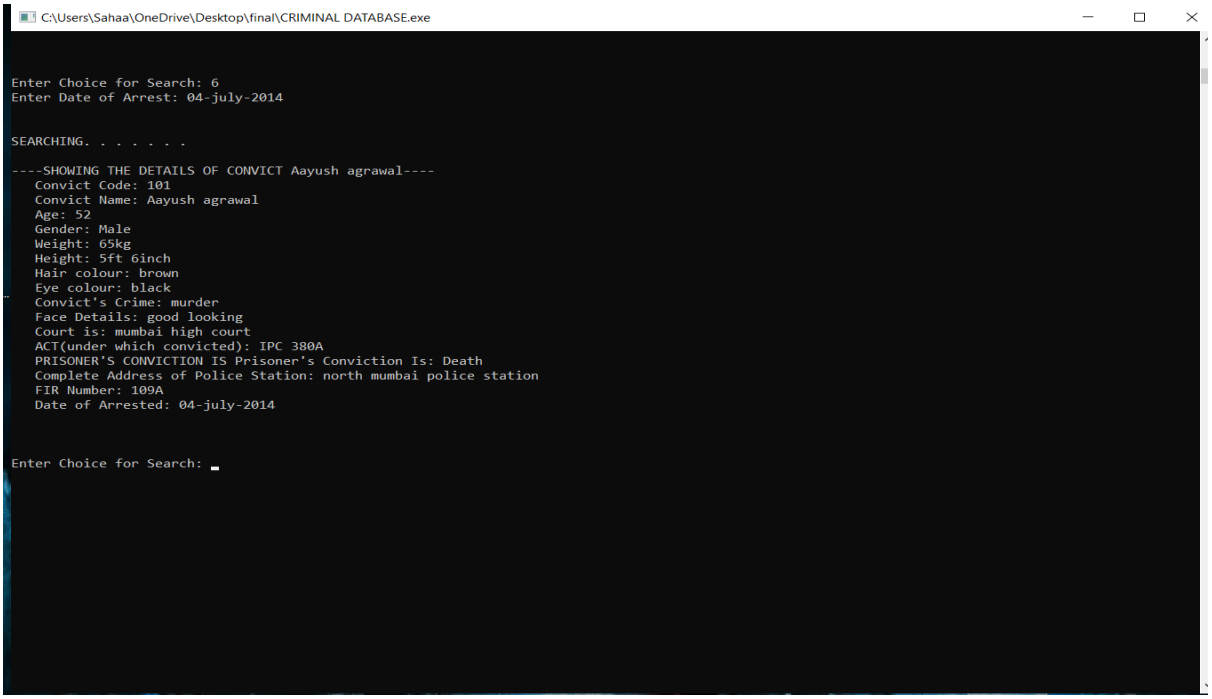

Fig 13. Searching by Date of Arrest

Performing Search by Date of Arrest.

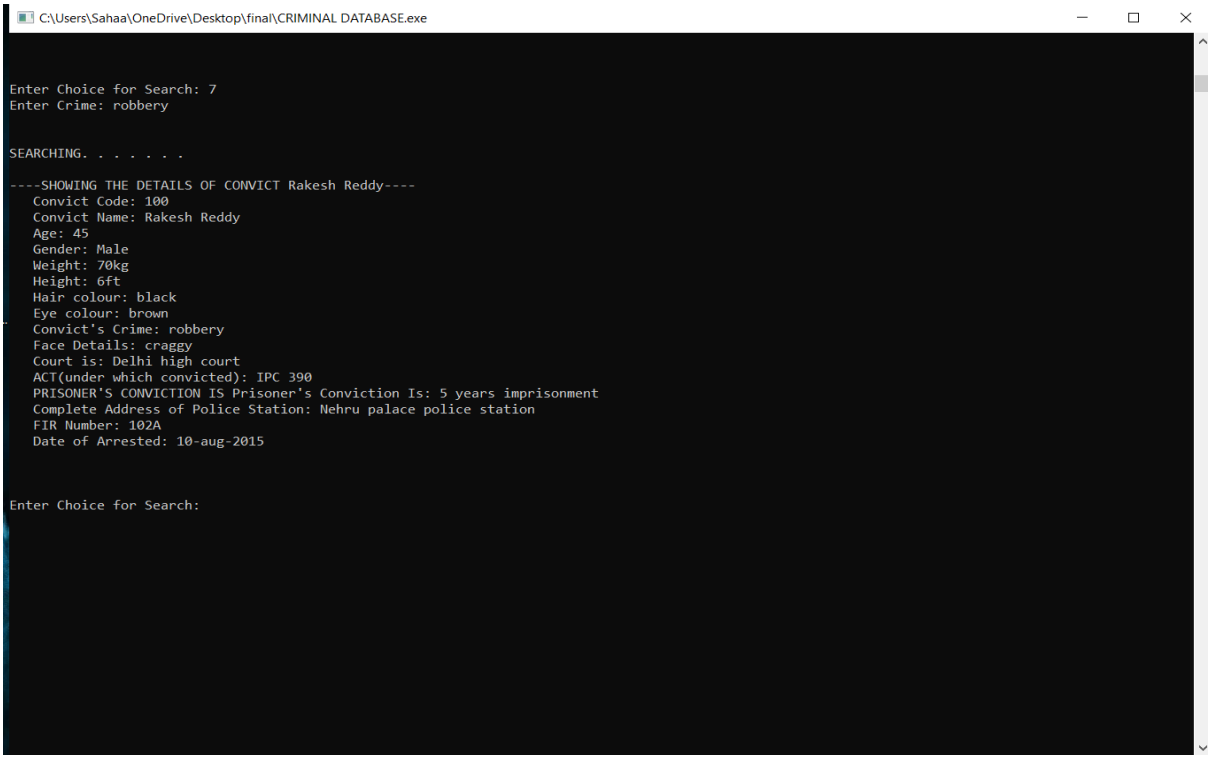

Fig 14. Searching by Crime

Performing Search by Crime.

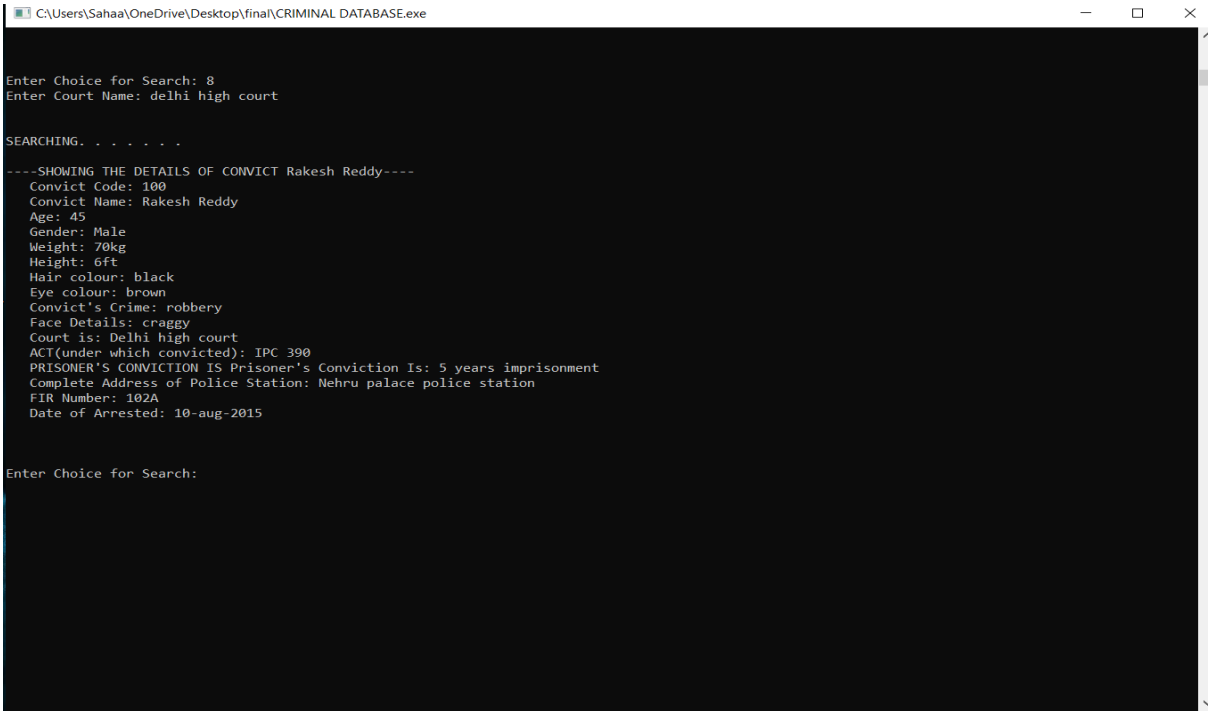

Fig 15. Searching by Court Name

Performing Search by Court Name.

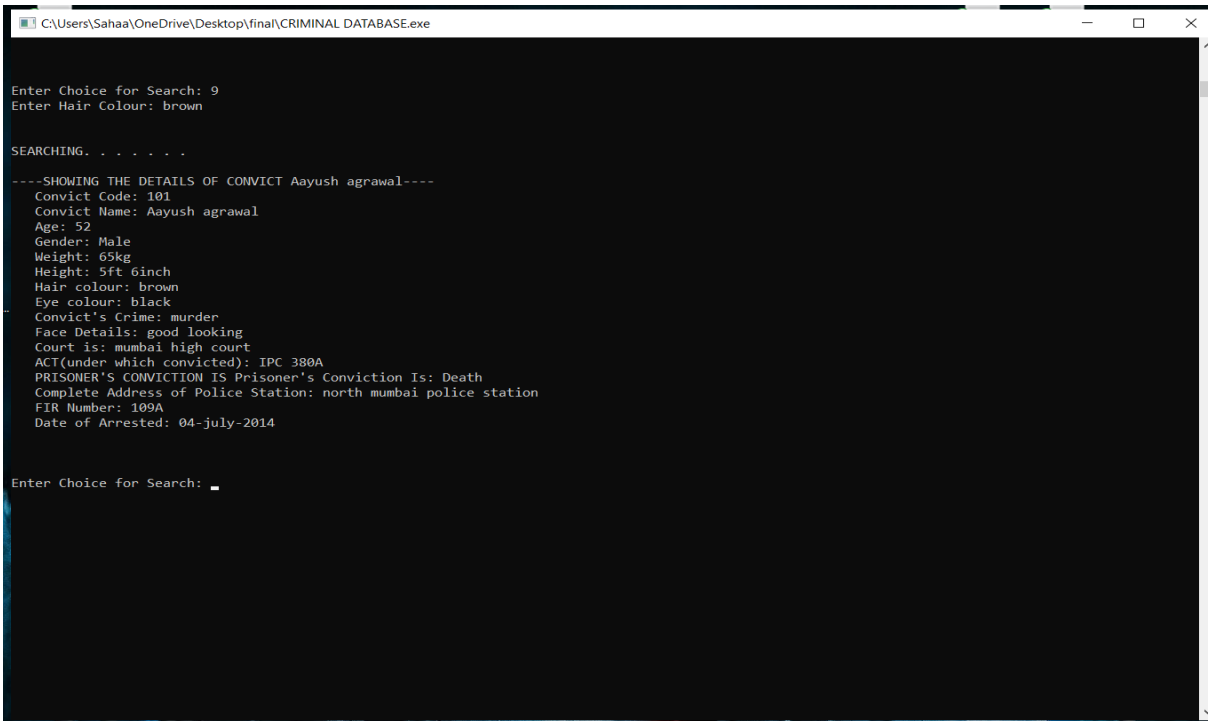

Fig 16. Searching by Hair Colour

Performing Search by Hair Colour.

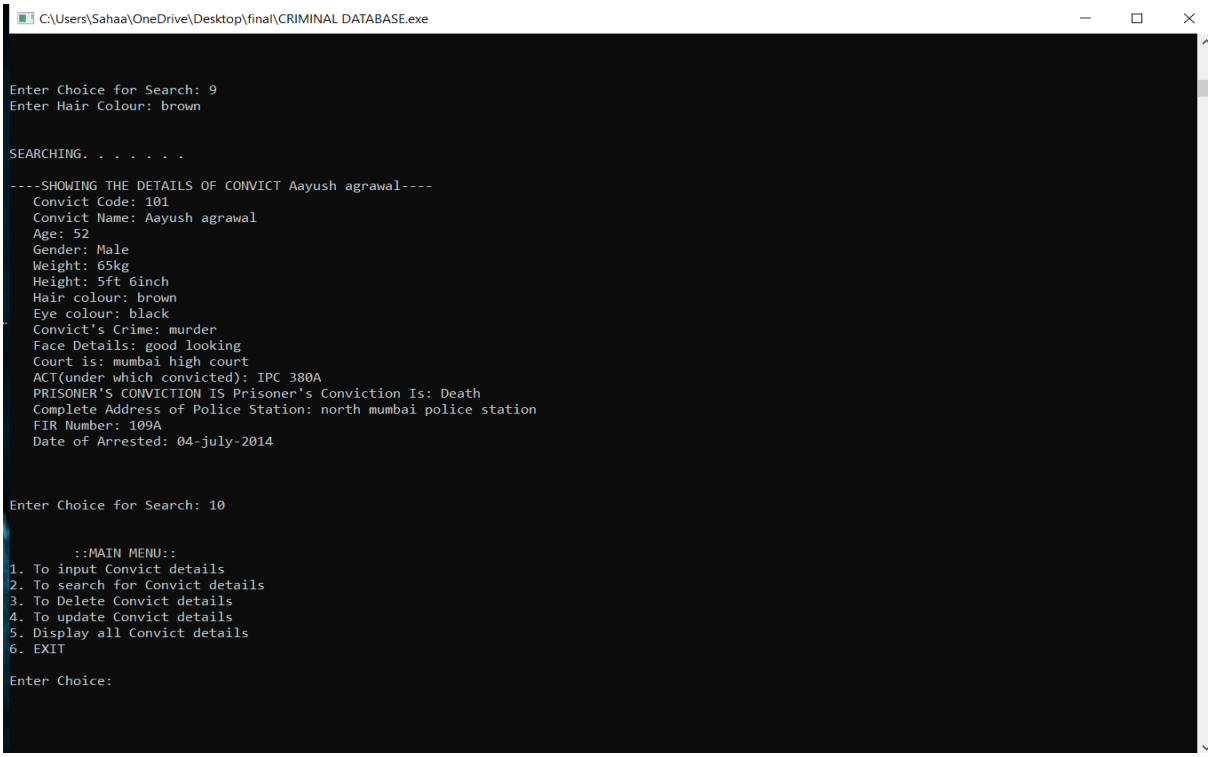

Fig 17. Searching by Hair Colour and Exiting from search

Performing Search by Hair colour and Exiting from Search.

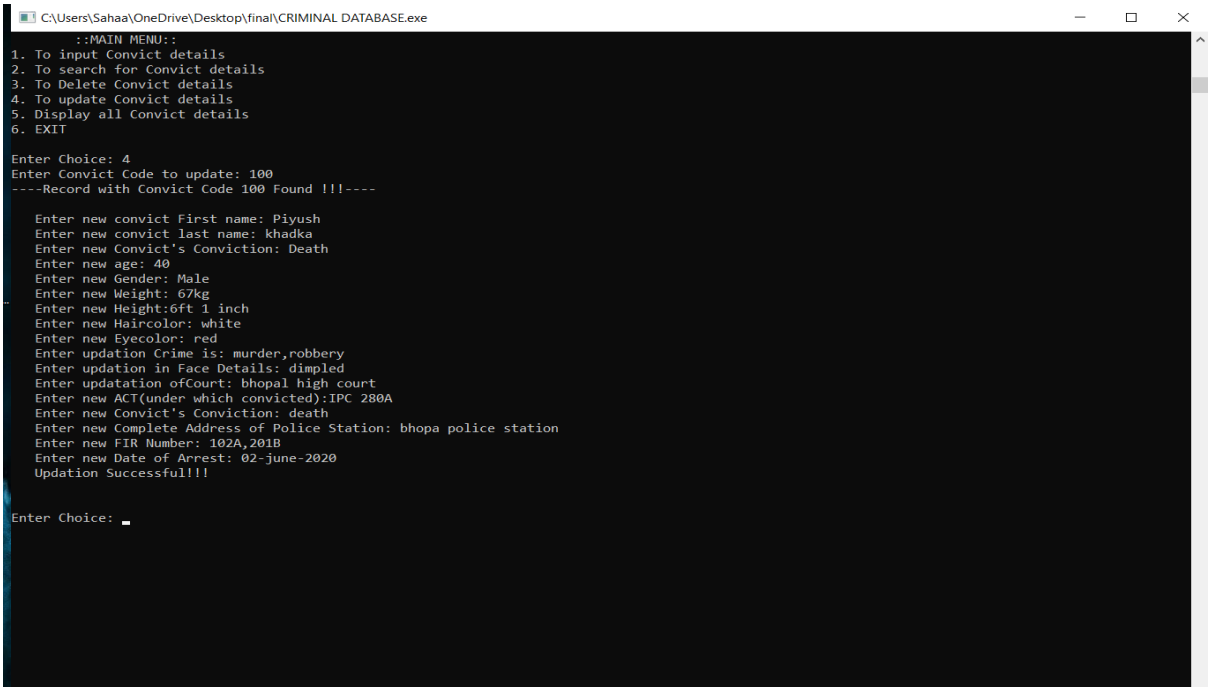

Fig 18. Updating Criminal records

Updating records.

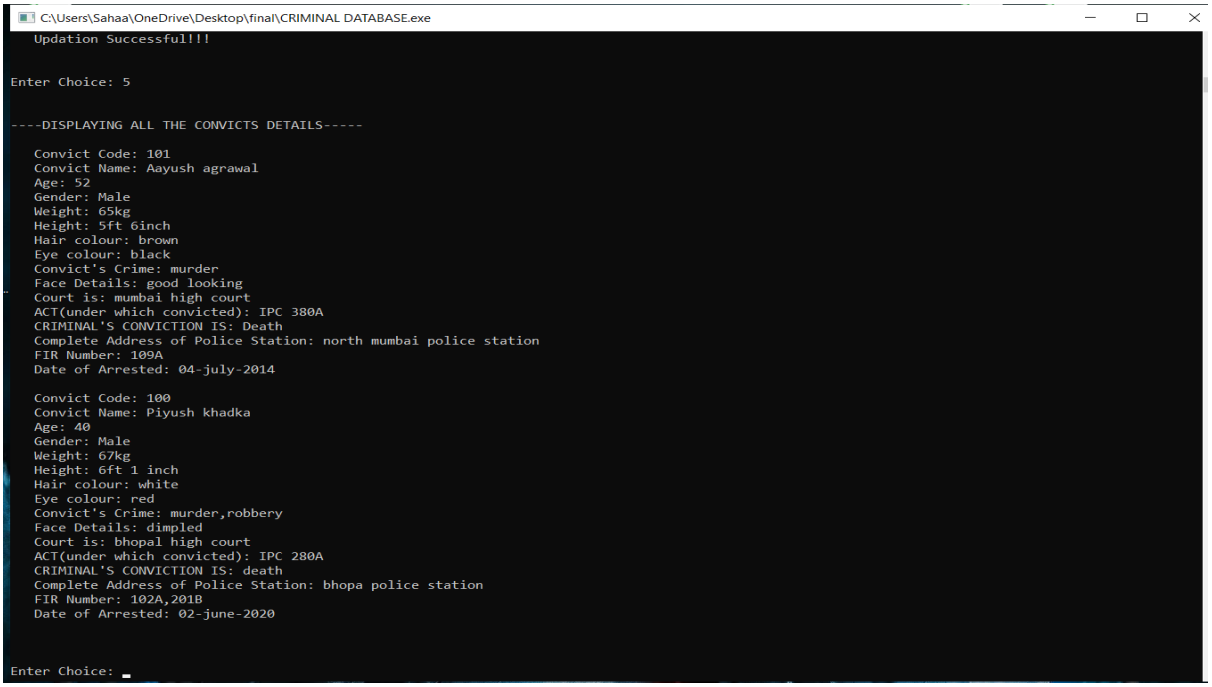

Fig 19. Displaying Records after Updating

Displaying All the record After Updating.

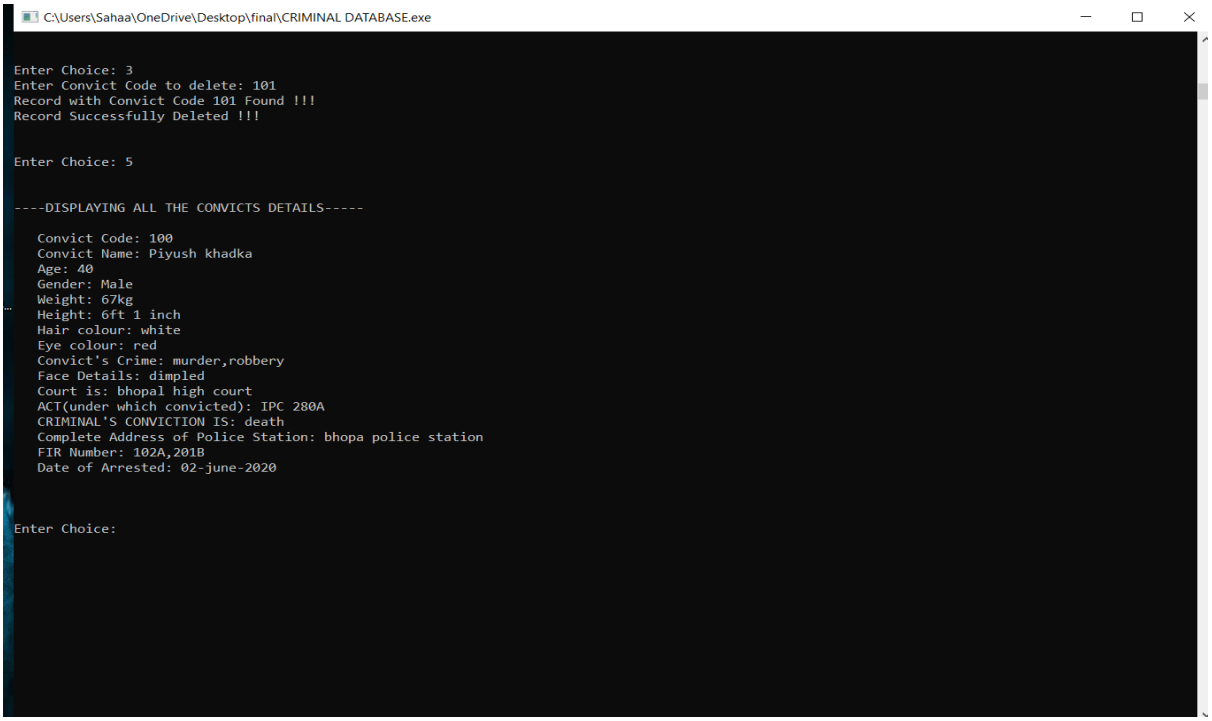

Fig 20. Deleting Record and Displaying Records after Deleting

Deleting Record and Displaying Remaining the Records after Deleting

CHAPTER 6

CONCLUSION

In the earlier days, with increasing the number of crimes, it is difficult to create and search the records of large number of criminals on paper. When we do not have every clue about them then we must search by few information in the previous criminal history. Since everything is getting digitalised, it is better to keep all the records of the criminals safely and securely. Also, if it is available to you on a click, it can save a lot of time. In this project we can input the detail of the multiple criminals. After that we can also update time by time and when we need it to delete, we can delete it. Main feature of this software is, we can search the criminal history of convicts by any information like Convicts Code, First Name, Last Name, Eye colour, Hair Colour, Date of Arrest, Crime, FIR Number etc.

This project will help to stop paper working completely in Crime bureau also they can do their works with software as in Standard way. The Crime bureau don’t have to hire so many staff to maintain Record. They may save their salary and can utilize in their Crime bureau infrastructural facility. By using this Software, they can save their time and can maintain Criminal Record Easily.