**LIBRARY MANAGEMENT SYSTEM**



A Course Project Report in the course

**Problem Solving with Programming**

**School of Computer Science & Artificial Intelligence**

**By**

2103A51239 P.NEHA SADHVI

2103A51220 B.VAMSHIDHAR

2103A51222 B.BHAGYARAJ

2105A41124 D.CHARAN TEJA

**Under the Guidance of**

**Dr. MOHAMMED ALI SHAIK**

Assistant Professor, School of CS& AI

**Submitted to**



**Project Description**

This is sample text, delete and describe your project inputs, output, and processing methodology. And ignore the rest of content. On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers, footers, lists, cover pages, and other document building blocks. When you create pictures, charts, or diagrams, they also coordinate with your current document look.

You can easily change the formatting of selected text in the document text by choosing a look for the selected text from the Quick Styles gallery on the Home tab. You can also format text directly by using the other controls on the Home tab. Most controls offer a choice of using the look from the current theme or using a format that you specify directly.

To change the overall look of your document, choose new Theme elements on the Page Layout tab. To change the looks available in the Quick Style gallery, use the Change Current Quick Style Set command. Both the Themes gallery and the Quick Styles gallery provide reset commands so that you can always restore the look of your document to the original contained in your current template.

For library management, this project considers six departments – Computer, Electrical, Civil, Electronics, Mechanical and Architecture. These departments work simultaneously with the operations mentioned above. You can add a book to the Civil section, delete a book from the Electrical section or view issued book details of the Mechanical [department](https://www.codewithc.com/mini-project-in-c-department-store-management-system/).

These are the **functions used** in this mini project:

**void mainmenu(void)** – This function is used to display the main menu of this project. Scroll down to Output to view the main menu.

**void returnfunc(void)**– Inside this function, the main menu function (mentioned above) is called when the user presses a key. With this, the user can return back to the main menu.

**void addbooks(void)**– This function adds books in a file. For that, you need to mention the department to which you want to add the book. The record is saved in a file. And, it is similar for the following functions as well.

**void deletebooks(void)**  
**void editbooks(void)**  
**void searchbooks(void)**  
**void issuebooks(void)**  
**void viewbooks(void)**

**void issuerecord()** – With this function, you can keep record of the [student](https://www.codewithc.com/mini-project-in-c-student-record-system/) to whom the book has been issued.

**void closeapplication(void)** – This function is for closing the application.

**int  getdata()** – This function asks for [data](https://www.codewithc.com/data-visualization-java-project/) input from the user.

**int checkid(int)** – This function is used to check whether the ID of a book entered by a user exists in file or not.

**void Password()** – Due to this function, the user is asked to input password to run the application after it is opened. You can’t change the password upon running the application.

**void gotoxy (int x, int y)** – You need to understand this function as it is one of the most important one used in mini project on Library Management System in C.

PROBLEM STATEMENT:

Write a C Program To Implement Library Management System Provide the Functionality For below Mentioned:

\*ADD A NEW BOOK

\*Enter The Book ID---fbook id

\*Enter The Name---fname

\*Enter The Author

\*Enter The Rack

\*Enter The Price---fprice

\*Enter The Quantity---fquanity

\*ENTER THE INFORMATION (DETAILS) OF THE BOOK:

1.Book id:

2.Book name:

3.Author:

4.Quantity:

5.Price:

6.Rack no:

**MODULES:**

In this application all variables and structure are declared globally so that these variables and structure members can be accessed throughout the program at any function call. We can choose any function by using function calls which are declared in switch-case. In order to repeat the loop control statement (do-while) is used with condition. The memory allocation will be done in this program dynamically. The application asks the person who runs the program that want to store. In this application four modules are used

**. 1. Read/Input**

This **mini project in**[**C Library**](https://www.codewithc.com/malloc-c-the-c-library-youve-always-wanted-all-information/)[**Management System**](https://www.codewithc.com/sales-management-system-project-c/) is a console application without graphic developed using the [C programming language](https://www.codewithc.com/forums/topic/how-c-programming-language-is-different-from-other-languages/). It is compiled in Code::Blocks with the [GCC compiler](https://www.codewithc.com/how-to-install-gcc-compiler-in-fedora-19/). In this, you can perform book-related operations like in a REAL library [management system](https://www.codewithc.com/phonebook-management-system-project-in-c/) with computer.

Here, you can perform functions such as add books, return books, issue books, delete record of books issued, view record of books issued, [search](https://www.codewithc.com/breadth-first-search-in-c/) for books, and more. File handling has been extensively used in this project for almost all functions. So, this project can definitely guide you to understand C mini projects in a better way.

**2. Sorting**

In this module sorting of data is done according to the chosen wise. In this module there is a sub menu which asks to select the sorting wise by using switch case. The sorting sub menu will be like press 1 to add books press 2 to delete books press 3 to search books press 4 issue books 5 to view book list press 6 to edit books record press 7 to close application

**3. Searching**

In this module searching of data is done according to the chosen wise. In this module there is a sub menu which asks to select the categories. The sorting sub menu will be like press 1 to computer press 2 to electronics press 3 to electrical press 4 to civil 5 to mechanical press 6 architecture press 7 to back to main menu. In this module we used another control statement (do while) so that the application asks whether to continue searching.

**4. Print**

In this module all the stored details of books will be displayed on to the screen. In this module printf function and for loop are used

**KNOWLEDGE REQUIRED TO DEVELOP THIS APPLICATION**

➢ Control Statements(if, if-else, switch

) ➢ Loop Statements(do while, for)

➢ Arrays (1-arrays)

➢ Strings (Strings and Table of strings) and its functions (strcpy, strcmp)

➢ Functions (Any type of user defined functions)

➢ Structure (structures and nested structures)

➢ Pointers (pointer to strings and pointers to structures)

➢ Dynamic Memory Allocation (malloc/ calloc/ realloc)

**Project Code**

#include<windows.h>

#include<stdio.h>

#include<conio.h>

#include <stdlib.h>

#include<string.h> //contains strcmp(),strcpy(),strlen(),etc

#include<ctype.h> //contains toupper(), tolower(),etc

#include<dos.h> //contains \_dos\_getdate

#include<time.h>

//#include<bios.h>

#define RETURNTIME 15

char catagories[][15]={"Computer","Electronics","Electrical","Civil","Mechnnical","Architecture"};

void returnfunc(void);

void mainmenu(void);

void addbooks(void);

void deletebooks(void);

void editbooks(void);

void searchbooks(void);

void issuebooks(void);

void viewbooks(void);

void closeapplication(void);

int getdata();

int checkid(int);

int t(void);

//void show\_mouse(void);

void Password();

void issuerecord();

void loaderanim();

//list of global files that can be acceed form anywhere in program

FILE \*fp,\*ft,\*fs;

COORD coord = {0, 0};

//list of global variable

int s;

char findbook;

char password[10]={"codewithc"};

void gotoxy (int x, int y)

{

coord.X = x; coord.Y = y; // X and Y coordinates

SetConsoleCursorPosition(GetStdHandle(STD\_OUTPUT\_HANDLE), coord);

}

struct meroDate

{

int mm,dd,yy;

};

struct books

{

int id;

char stname[20];

char name[20];

char Author[20];

int quantity;

float Price;

int count;

int rackno;

char \*cat;

struct meroDate issued;

struct meroDate duedate;

};

struct books a;

int main()

{

Password();

getch();

return 0;

}

void mainmenu()

{

//loaderanim();

system("cls");

// textbackground(13);

int i;

gotoxy(20,3);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2 MAIN MENU \xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

// show\_mouse();

gotoxy(20,5);

printf("\xDB\xDB\xDB\xDB\xB2 1. Add Books ");

gotoxy(20,7);

printf("\xDB\xDB\xDB\xDB\xB2 2. Delete books");

gotoxy(20,9);

printf("\xDB\xDB\xDB\xDB\xB2 3. Search Books");

gotoxy(20,11);

printf("\xDB\xDB\xDB\xDB\xB2 4. Issue Books");

gotoxy(20,13);

printf("\xDB\xDB\xDB\xDB\xB2 5. View Book list");

gotoxy(20,15);

printf("\xDB\xDB\xDB\xDB\xB2 6. Edit Book's Record");

gotoxy(20,17);

printf("\xDB\xDB\xDB\xDB\xB2 7. Close Application");

gotoxy(20,19);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,20);

t();

gotoxy(20,21);

printf("Enter your choice:");

switch(getch())

{

case '1':

addbooks();

break;

case '2':

deletebooks();

break;

case '3':

searchbooks();

break;

case '4':

issuebooks();

break;

case '5':

viewbooks();

break;

case '6':

editbooks();

break;

case '7':

{

system("cls");

gotoxy(16,3);

printf("\tLibrary Management System");

gotoxy(16,4);

printf("\tMini Project in C");

gotoxy(16,5);

printf("\tis brought to you by");

gotoxy(16,7);

printf("\tCode with C Team");

gotoxy(16,8);

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

gotoxy(16,10);

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

gotoxy(16,11);

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

gotoxy(16,13);

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

gotoxy(10,17);

printf("Exiting in 3 second...........>");

//flushall();

Sleep(3000);

exit(0);

}

default:

{

gotoxy(10,23);

printf("\aWrong Entry!!Please re-entered correct option");

if(getch())

mainmenu();

}

}

}

void addbooks(void) //funtion that add books

{

system("cls");

int i;

gotoxy(20,5);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2SELECT CATEGOIES\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,7);

printf("\xDB\xDB\xDB\xDB\xB2 1. Computer");

gotoxy(20,9);

printf("\xDB\xDB\xDB\xDB\xB2 2. Electronics");

gotoxy(20,11);

printf("\xDB\xDB\xDB\xDB\xB2 3. Electrical");

gotoxy(20,13);

printf("\xDB\xDB\xDB\xDB\xB2 4. Civil");

gotoxy(20,15);

printf("\xDB\xDB\xDB\xDB\xB2 5. Mechanical");

gotoxy(20,17);

printf("\xDB\xDB\xDB\xDB\xB2 6. Architecture");

gotoxy(20,19);

printf("\xDB\xDB\xDB\xDB\xB2 7. Back to main menu");

gotoxy(20,21);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,22);

printf("Enter your choice:");

scanf("%d",&s);

if(s==7)

mainmenu() ;

system("cls");

fp=fopen("Bibek.dat","ab+");

if(getdata()==1)

{

a.cat=catagories[s-1];

fseek(fp,0,SEEK\_END);

fwrite(&a,sizeof(a),1,fp);

fclose(fp);

gotoxy(21,14);

printf("The record is sucessfully saved");

gotoxy(21,15);

printf("Save any more?(Y / N):");

if(getch()=='n')

mainmenu();

else

system("cls");

addbooks();

}

}

void deletebooks() //function that delete items from file fp

{

system("cls");

int d;

char another='y';

while(another=='y') //infinite loop

{

system("cls");

gotoxy(10,5);

printf("Enter the Book ID to delete:");

scanf("%d",&d);

fp=fopen("Bibek.dat","rb+");

rewind(fp);

while(fread(&a,sizeof(a),1,fp)==1)

{

if(a.id==d)

{

gotoxy(10,7);

printf("The book record is available");

gotoxy(10,8);

printf("Book name is %s",a.name);

gotoxy(10,9);

printf("Rack No. is %d",a.rackno);

findbook='t';

}

}

if(findbook!='t')

{

gotoxy(10,10);

printf("No record is found modify the search");

if(getch())

mainmenu();

}

if(findbook=='t' )

{

gotoxy(10,9);

printf("Do you want to delete it?(Y/N):");

if(getch()=='y')

{

ft=fopen("test.dat","wb+"); //temporary file for delete

rewind(fp);

while(fread(&a,sizeof(a),1,fp)==1)

{

if(a.id!=d)

{

fseek(ft,0,SEEK\_CUR);

fwrite(&a,sizeof(a),1,ft); //write all in tempory file except that

} //we want to delete

}

fclose(ft);

fclose(fp);

remove("Bibek.dat");

rename("test.dat","Bibek.dat"); //copy all item from temporary file to fp except that

fp=fopen("Bibek.dat","rb+"); //we want to delete

if(findbook=='t')

{

gotoxy(10,10);

printf("The record is sucessfully deleted");

gotoxy(10,11);

printf("Delete another record?(Y/N)");

}

}

else

mainmenu();

fflush(stdin);

another=getch();

}

}

gotoxy(10,15);

mainmenu();

}

void searchbooks()

{

system("cls");

int d;

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Search Books\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

gotoxy(20,10);

printf("\xDB\xDB\xDB\xB2 1. Search By ID");

gotoxy(20,14);

printf("\xDB\xDB\xDB\xB2 2. Search By Name");

gotoxy( 15,20);

printf("Enter Your Choice");

fp=fopen("Bibek.dat","rb+"); //open file for reading propose

rewind(fp); //move pointer at the begining of file

switch(getch())

{

case '1':

{

system("cls");

gotoxy(25,4);

printf("\*\*\*\*Search Books By Id\*\*\*\*");

gotoxy(20,5);

printf("Enter the book id:");

scanf("%d",&d);

gotoxy(20,7);

printf("Searching........");

while(fread(&a,sizeof(a),1,fp)==1)

{

if(a.id==d)

{

Sleep(2);

gotoxy(20,7);

printf("The Book is available");

gotoxy(20,8);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,9);

printf("\xB2 ID:%d",a.id);gotoxy(47,9);printf("\xB2");

gotoxy(20,10);

printf("\xB2 Name:%s",a.name);gotoxy(47,10);printf("\xB2");

gotoxy(20,11);

printf("\xB2 Author:%s ",a.Author);gotoxy(47,11);printf("\xB2");

gotoxy(20,12);

printf("\xB2 Qantity:%d ",a.quantity);gotoxy(47,12);printf("\xB2"); gotoxy(47,11);printf("\xB2");

gotoxy(20,13);

printf("\xB2 Price:Rs.%.2f",a.Price);gotoxy(47,13);printf("\xB2");

gotoxy(20,14);

printf("\xB2 Rack No:%d ",a.rackno);gotoxy(47,14);printf("\xB2");

gotoxy(20,15);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

findbook='t';

}

}

if(findbook!='t') //checks whether conditiion enters inside loop or not

{

gotoxy(20,8);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,9);printf("\xB2"); gotoxy(38,9);printf("\xB2");

gotoxy(20,10);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(22,9);printf("\aNo Record Found");

}

gotoxy(20,17);

printf("Try another search?(Y/N)");

if(getch()=='y')

searchbooks();

else

mainmenu();

break;

}

case '2':

{

char s[15];

system("cls");

gotoxy(25,4);

printf("\*\*\*\*Search Books By Name\*\*\*\*");

gotoxy(20,5);

printf("Enter Book Name:");

scanf("%s",s);

int d=0;

while(fread(&a,sizeof(a),1,fp)==1)

{

if(strcmp(a.name,(s))==0) //checks whether a.name is equal to s or not

{

gotoxy(20,7);

printf("The Book is available");

gotoxy(20,8);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,9);

printf("\xB2 ID:%d",a.id);gotoxy(47,9);printf("\xB2");

gotoxy(20,10);

printf("\xB2 Name:%s",a.name);gotoxy(47,10);printf("\xB2");

gotoxy(20,11);

printf("\xB2 Author:%s",a.Author);gotoxy(47,11);printf("\xB2");

gotoxy(20,12);

printf("\xB2 Qantity:%d",a.quantity);gotoxy(47,12);printf("\xB2");

gotoxy(20,13);

printf("\xB2 Price:Rs.%.2f",a.Price);gotoxy(47,13);printf("\xB2");

gotoxy(20,14);

printf("\xB2 Rack No:%d ",a.rackno);gotoxy(47,14);printf("\xB2");

gotoxy(20,15);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

d++;

}

}

if(d==0)

{

gotoxy(20,8);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,9);printf("\xB2"); gotoxy(38,9);printf("\xB2");

gotoxy(20,10);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(22,9);printf("\aNo Record Found");

}

gotoxy(20,17);

printf("Try another search?(Y/N)");

if(getch()=='y')

searchbooks();

else

mainmenu();

break;

}

default :

getch();

searchbooks();

}

fclose(fp);

}

void issuebooks(void) //function that issue books from library

{

int t;

system("cls");

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*ISSUE SECTION\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

gotoxy(10,5);

printf("\xDB\xDB\xDB\xDb\xB2 1. Issue a Book");

gotoxy(10,7);

printf("\xDB\xDB\xDB\xDb\xB2 2. View Issued Book");

gotoxy(10,9);

printf("\xDB\xDB\xDB\xDb\xB2 3. Search Issued Book");

gotoxy(10,11);

printf("\xDB\xDB\xDB\xDb\xB2 4. Remove Issued Book");

gotoxy(10,14);

printf("Enter a Choice:");

switch(getch())

{

case '1': //issue book

{

system("cls");

int c=0;

char another='y';

while(another=='y')

{

system("cls");

gotoxy(15,4);

printf("\*\*\*Issue Book section\*\*\*");

gotoxy(10,6);

printf("Enter the Book Id:");

scanf("%d",&t);

fp=fopen("Bibek.dat","rb");

fs=fopen("Issue.dat","ab+");

if(checkid(t)==0) //issues those which are present in library

{

gotoxy(10,8);

printf("The book record is available");

gotoxy(10,9);

printf("There are %d unissued books in library ",a.quantity);

gotoxy(10,10);

printf("The name of book is %s",a.name);

gotoxy(10,11);

printf("Enter student name:");

scanf("%s",a.stname);

//struct dosdate\_t d; //for current date

//\_dos\_getdate(&d);

//a.issued.dd=d.day;

//a.issued.mm=d.month;

//a.issued.yy=d.year;

gotoxy(10,12);

printf("Issued date=%d-%d-%d",a.issued.dd,a.issued.mm,a.issued.yy);

gotoxy(10,13);

printf("The BOOK of ID %d is issued",a.id);

a.duedate.dd=a.issued.dd+RETURNTIME; //for return date

a.duedate.mm=a.issued.mm;

a.duedate.yy=a.issued.yy;

if(a.duedate.dd>30)

{

a.duedate.mm+=a.duedate.dd/30;

a.duedate.dd-=30;

}

if(a.duedate.mm>12)

{

a.duedate.yy+=a.duedate.mm/12;

a.duedate.mm-=12;

}

gotoxy(10,14);

printf("To be return:%d-%d-%d",a.duedate.dd,a.duedate.mm,a.duedate.yy);

fseek(fs,sizeof(a),SEEK\_END);

fwrite(&a,sizeof(a),1,fs);

fclose(fs);

c=1;

}

if(c==0)

{

gotoxy(10,11);

printf("No record found");

}

gotoxy(10,15);

printf("Issue any more(Y/N):");

fflush(stdin);

another=getche();

fclose(fp);

}

break;

}

case '2': //show issued book list

{

system("cls");

int j=4;

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Issued book list\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

gotoxy(2,2);

printf("STUDENT NAME CATEGORY ID BOOK NAME ISSUED DATE RETURN DATE");

fs=fopen("Issue.dat","rb");

while(fread(&a,sizeof(a),1,fs)==1)

{

gotoxy(2,j);

printf("%s",a.stname);

gotoxy(18,j);

printf("%s",a.cat);

gotoxy(30,j);

printf("%d",a.id);

gotoxy(36,j);

printf("%s",a.name);

gotoxy(51,j);

printf("%d-%d-%d",a.issued.dd,a.issued.mm,a.issued.yy );

gotoxy(65,j);

printf("%d-%d-%d",a.duedate.dd,a.duedate.mm,a.duedate.yy);

//struct dosdate\_t d;

//\_dos\_getdate(&d);

gotoxy(50,25);

// printf("Current date=%d-%d-%d",d.day,d.month,d.year);

j++;

}

fclose(fs);

gotoxy(1,25);

returnfunc();

}

break;

case '3': //search issued books by id

{

system("cls");

gotoxy(10,6);

printf("Enter Book ID:");

int p,c=0;

char another='y';

while(another=='y')

{

scanf("%d",&p);

fs=fopen("Issue.dat","rb");

while(fread(&a,sizeof(a),1,fs)==1)

{

if(a.id==p)

{

issuerecord();

gotoxy(10,12);

printf("Press any key.......");

getch();

issuerecord();

c=1;

}

}

fflush(stdin);

fclose(fs);

if(c==0)

{

gotoxy(10,8);

printf("No Record Found");

}

gotoxy(10,13);

printf("Try Another Search?(Y/N)");

another=getch();

}

}

break;

case '4': //remove issued books from list

{

system("cls");

int b;

FILE \*fg; //declaration of temporary file for delete

char another='y';

while(another=='y')

{

gotoxy(10,5);

printf("Enter book id to remove:");

scanf("%d",&b);

fs=fopen("Issue.dat","rb+");

while(fread(&a,sizeof(a),1,fs)==1)

{

if(a.id==b)

{

issuerecord();

findbook='t';

}

if(findbook=='t')

{

gotoxy(10,12);

printf("Do You Want to Remove it?(Y/N)");

if(getch()=='y')

{

fg=fopen("record.dat","wb+");

rewind(fs);

while(fread(&a,sizeof(a),1,fs)==1)

{

if(a.id!=b)

{

fseek(fs,0,SEEK\_CUR);

fwrite(&a,sizeof(a),1,fg);

}

}

fclose(fs);

fclose(fg);

remove("Issue.dat");

rename("record.dat","Issue.dat");

gotoxy(10,14);

printf("The issued book is removed from list");

}

}

if(findbook!='t')

{

gotoxy(10,15);

printf("No Record Found");

}

}

gotoxy(10,16);

printf("Delete any more?(Y/N)");

another=getch();

}

}

default:

gotoxy(10,18);

printf("\aWrong Entry!!");

getch();

issuebooks();

break;

}

gotoxy(1,30);

returnfunc();

}

void viewbooks(void) //show the list of book persists in library

{

int i=0,j;

system("cls");

gotoxy(1,1);

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Book List\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

gotoxy(2,2);

printf(" CATEGORY ID BOOK NAME AUTHOR QTY PRICE RackNo ");

j=4;

fp=fopen("Bibek.dat","rb");

while(fread(&a,sizeof(a),1,fp)==1)

{

gotoxy(3,j);

printf("%s",a.cat);

gotoxy(16,j);

printf("%d",a.id);

gotoxy(22,j);

printf("%s",a.name);

gotoxy(36,j);

printf("%s",a.Author);

gotoxy(50,j);

printf("%d",a.quantity);

gotoxy(57,j);

printf("%.2f",a.Price);

gotoxy(69,j);

printf("%d",a.rackno);

printf("\n\n");

j++;

i=i+a.quantity;

}

gotoxy(3,25);

printf("Total Books =%d",i);

fclose(fp);

gotoxy(35,25);

returnfunc();

}

void editbooks(void) //edit information about book

{

system("cls");

int c=0;

int d,e;

gotoxy(20,4);

printf("\*\*\*\*Edit Books Section\*\*\*\*");

char another='y';

while(another=='y')

{

system("cls");

gotoxy(15,6);

printf("Enter Book Id to be edited:");

scanf("%d",&d);

fp=fopen("Bibek.dat","rb+");

while(fread(&a,sizeof(a),1,fp)==1)

{

if(checkid(d)==0)

{

gotoxy(15,7);

printf("The book is availble");

gotoxy(15,8);

printf("The Book ID:%d",a.id);

gotoxy(15,9);

printf("Enter new name:");scanf("%s",a.name);

gotoxy(15,10);

printf("Enter new Author:");scanf("%s",a.Author);

gotoxy(15,11);

printf("Enter new quantity:");scanf("%d",&a.quantity);

gotoxy(15,12);

printf("Enter new price:");scanf("%f",&a.Price);

gotoxy(15,13);

printf("Enter new rackno:");scanf("%d",&a.rackno);

gotoxy(15,14);

printf("The record is modified");

fseek(fp,ftell(fp)-sizeof(a),0);

fwrite(&a,sizeof(a),1,fp);

fclose(fp);

c=1;

}

if(c==0)

{

gotoxy(15,9);

printf("No record found");

}

}

gotoxy(15,16);

printf("Modify another Record?(Y/N)");

fflush(stdin);

another=getch() ;

}

returnfunc();

}

void returnfunc(void)

{

{

printf(" Press ENTER to return to main menu");

}

a:

if(getch()==13) //allow only use of enter

mainmenu();

else

goto a;

}

int getdata()

{

int t;

gotoxy(20,3);printf("Enter the Information Below");

gotoxy(20,4);printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(20,5);

printf("\xB2");gotoxy(46,5);printf("\xB2");

gotoxy(20,6);

printf("\xB2");gotoxy(46,6);printf("\xB2");

gotoxy(20,7);

printf("\xB2");gotoxy(46,7);printf("\xB2");

gotoxy(20,8);

printf("\xB2");gotoxy(46,8);printf("\xB2");

gotoxy(20,9);

printf("\xB2");gotoxy(46,9);printf("\xB2");

gotoxy(20,10);

printf("\xB2");gotoxy(46,10);printf("\xB2");

gotoxy(20,11);

printf("\xB2");gotoxy(46,11);printf("\xB2");

gotoxy(20,12);

printf("\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2\xB2");

gotoxy(21,5);

printf("Category:");

gotoxy(31,5);

printf("%s",catagories[s-1]);

gotoxy(21,6);

printf("Book ID:\t");

gotoxy(30,6);

scanf("%d",&t);

if(checkid(t) == 0)

{

gotoxy(21,13);

printf("\aThe book id already exists\a");

getch();

mainmenu();

return 0;

}

a.id=t;

gotoxy(21,7);

printf("Book Name:");gotoxy(33,7);

scanf("%s",a.name);

gotoxy(21,8);

printf("Author:");gotoxy(30,8);

scanf("%s",a.Author);

gotoxy(21,9);

printf("Quantity:");gotoxy(31,9);

scanf("%d",&a.quantity);

gotoxy(21,10);

printf("Price:");gotoxy(28,10);

scanf("%f",&a.Price);

gotoxy(21,11);

printf("Rack No:");gotoxy(30,11);

scanf("%d",&a.rackno);

return 1;

}

int checkid(int t) //check whether the book is exist in library or not

{

rewind(fp);

while(fread(&a,sizeof(a),1,fp)==1)

if(a.id==t)

return 0; //returns 0 if book exits

return 1; //return 1 if it not

}

int t(void) //for time

{

time\_t t;

time(&t);

printf("Date and time:%s\n",ctime(&t));

return 0 ;

}

/\*void show\_mouse(void) //show inactive mouse pointer in programme

{

union REGS in,out;

in.x.ax = 0x1;

int86(0x33,&in,&out);

}\*/

void Password(void) //for password option

{

system("cls");

char d[25]="Password Protected";

char ch,pass[10];

int i=0,j;

//textbackground(WHITE);

//textcolor(RED);

gotoxy(10,4);

for(j=0;j<20;j++)

{

Sleep(50);

printf("\*");

}

for(j=0;j<20;j++)

{

Sleep(50);

printf("%c",d[j]);

}

for(j=0;j<20;j++)

{

Sleep(50);

printf("\*");

}

gotoxy(10,10);

gotoxy(15,7);

printf("Enter Password:");

while(ch!=13)

{

ch=getch();

if(ch!=13 && ch!=8){

putch('\*');

pass[i] = ch;

i++;

}

}

pass[i] = '\0';

if(strcmp(pass,password)==0)

{

gotoxy(15,9);

//textcolor(BLINK);

printf("Password match");

gotoxy(17,10);

printf("Press any key to countinue.....");

getch();

mainmenu();

}

else

{

gotoxy(15,16);

printf("\aWarning!! Incorrect Password");

getch();

Password();

}

}

void issuerecord() //display issued book's information

{

system("cls");

gotoxy(10,8);

printf("The Book has taken by Mr. %s",a.stname);

gotoxy(10,9);

printf("Issued Date:%d-%d-%d",a.issued.dd,a.issued.mm,a.issued.yy);

gotoxy(10,10);

printf("Returning Date:%d-%d-%d",a.duedate.dd,a.duedate.mm,a.duedate.yy);

}

/\*void loaderanim()

{

int loader;

system("cls");

gotoxy(20,10);

printf("LOADING........");

printf("\n\n");

gotoxy(22,11);

for(loader=1;loader<20;loader++)

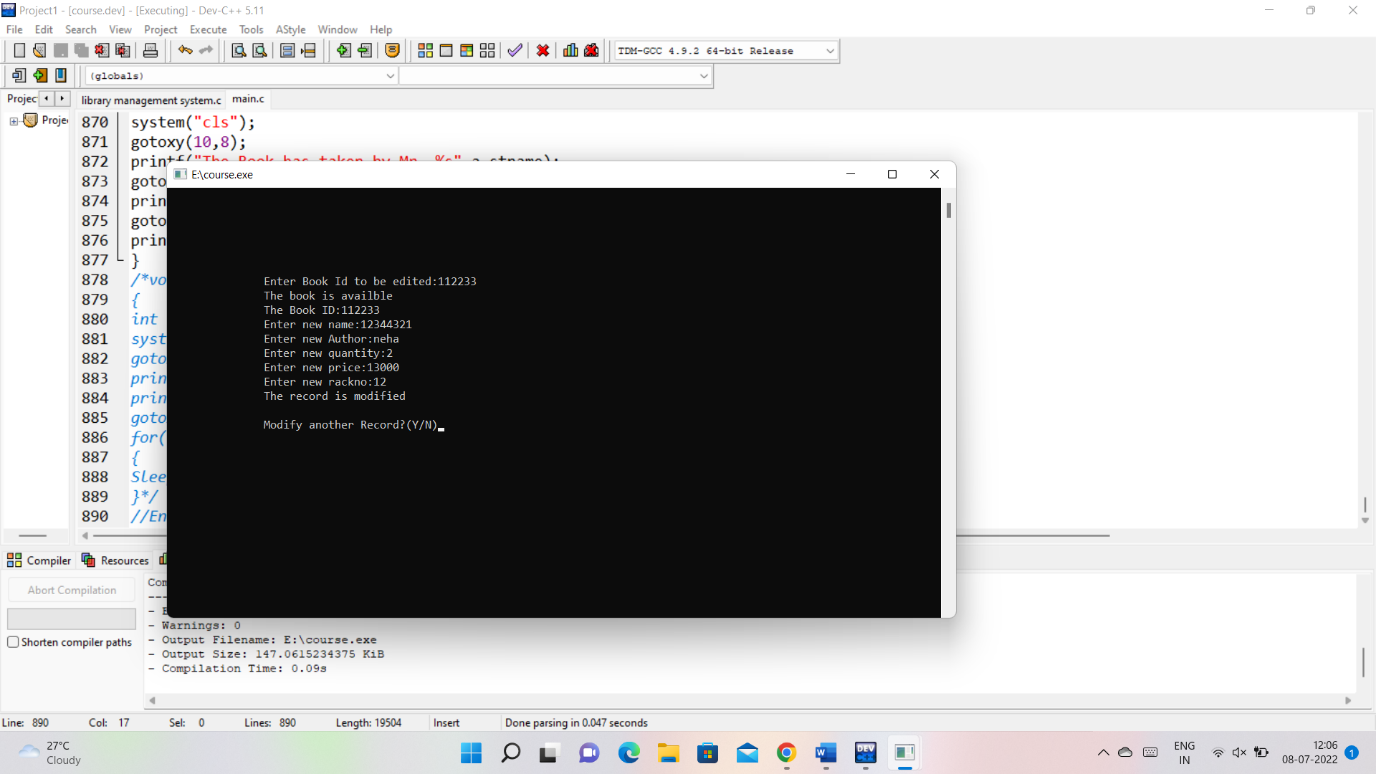
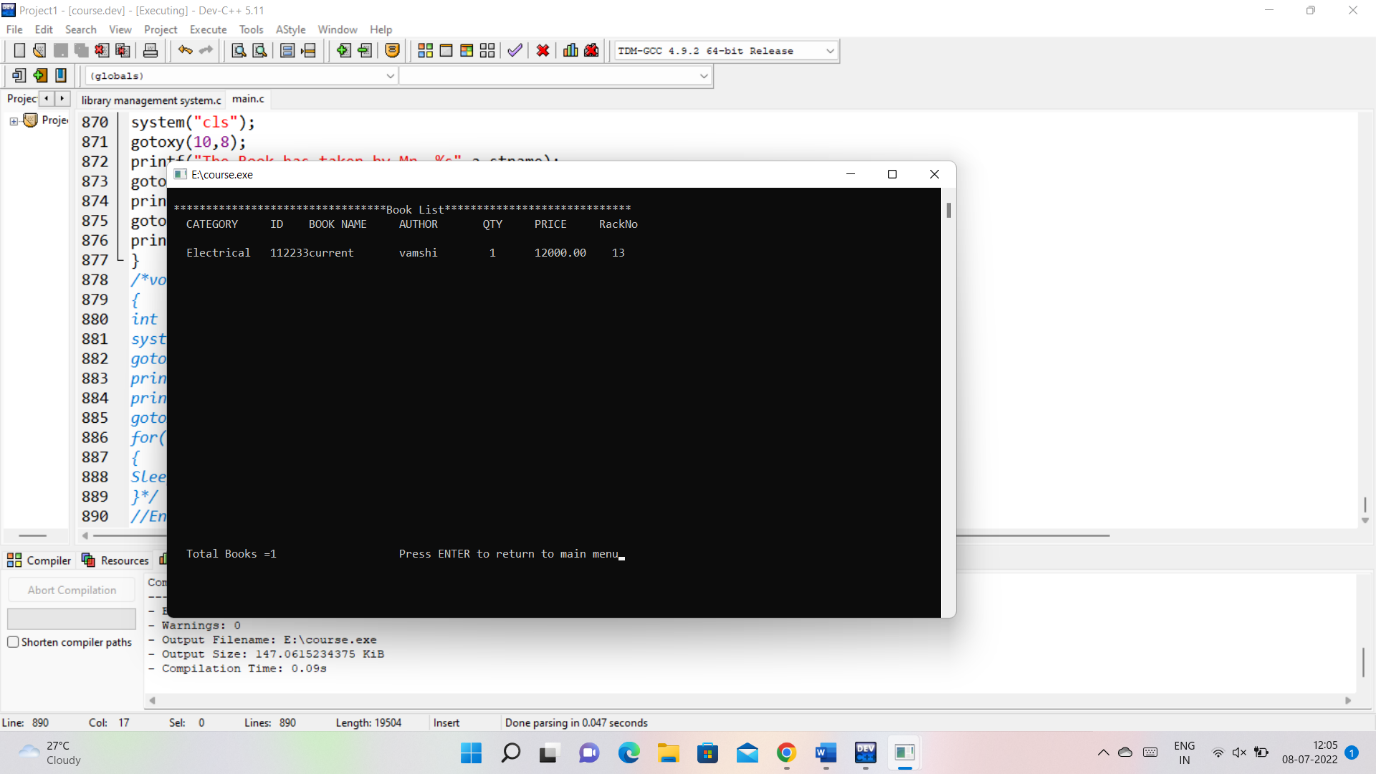
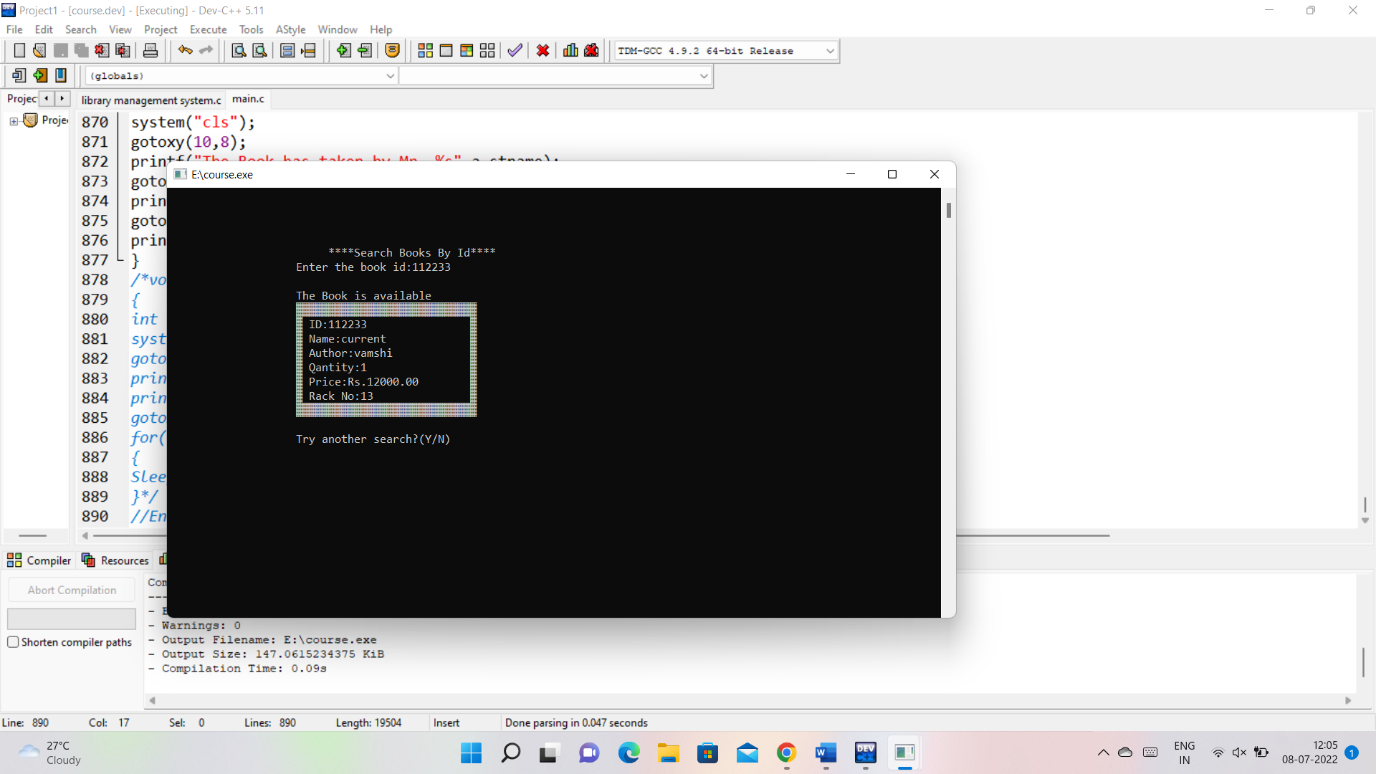
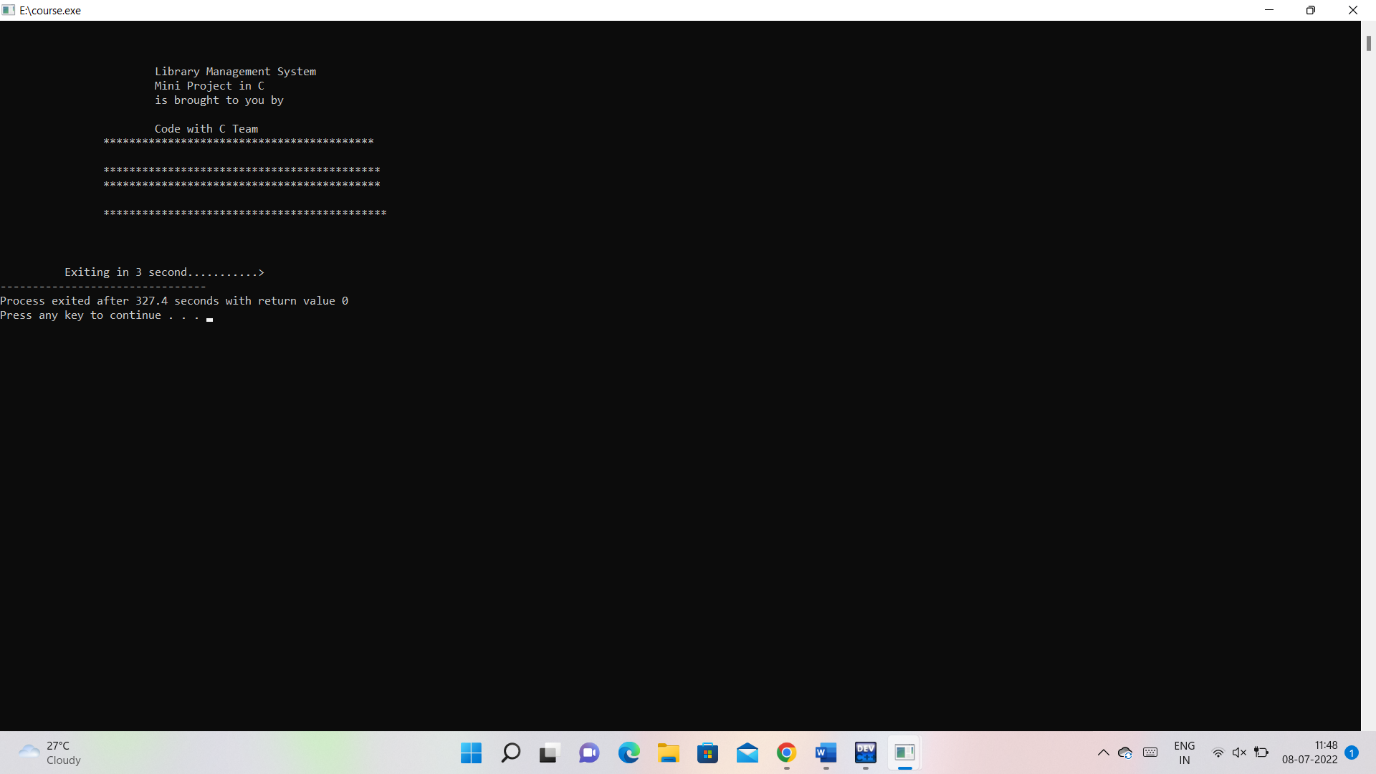
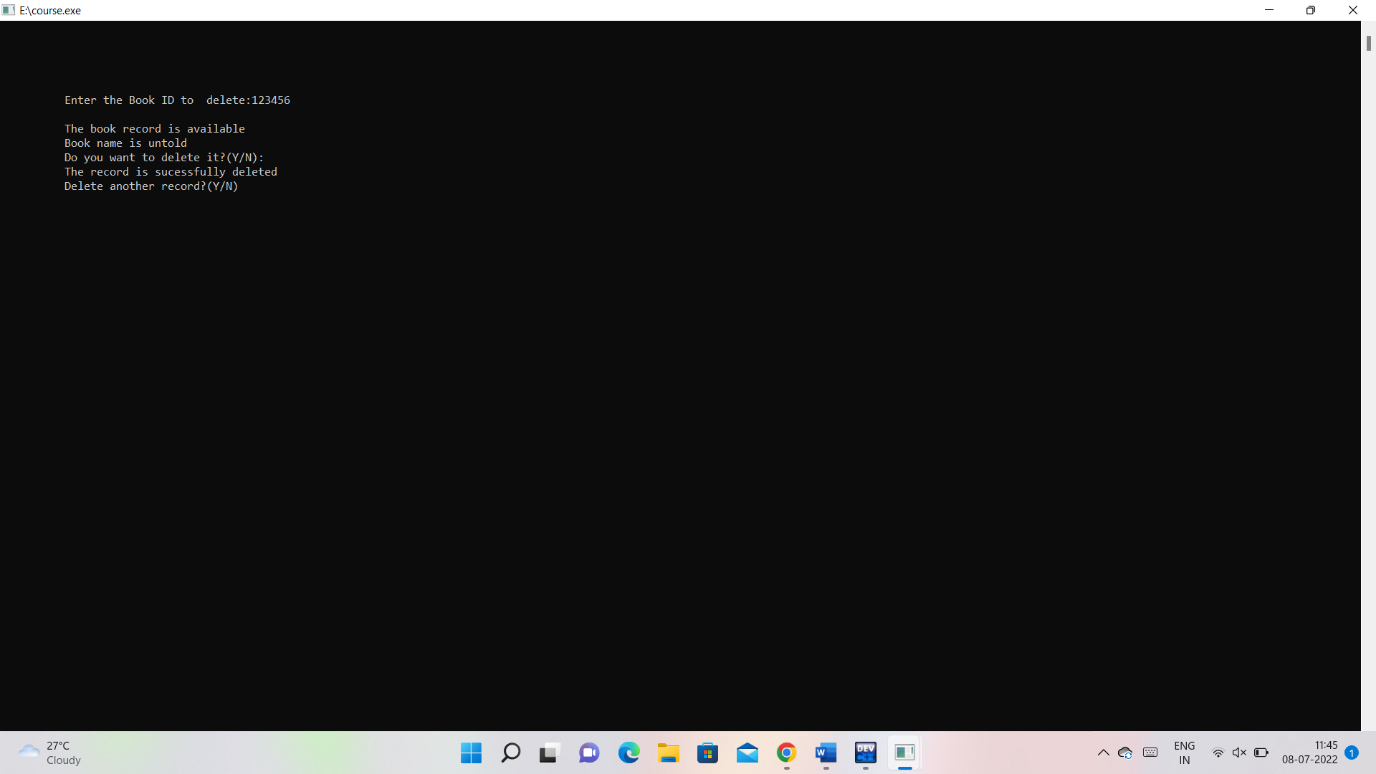
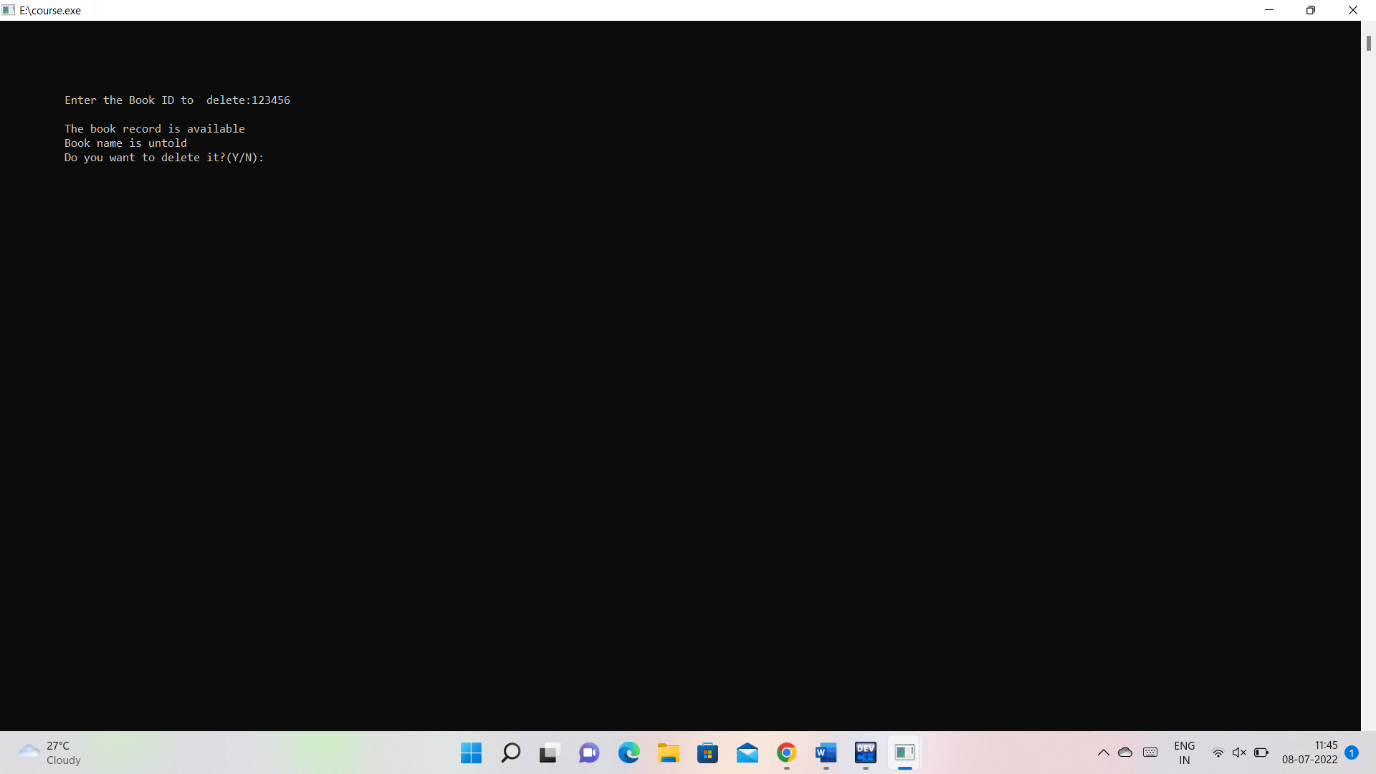
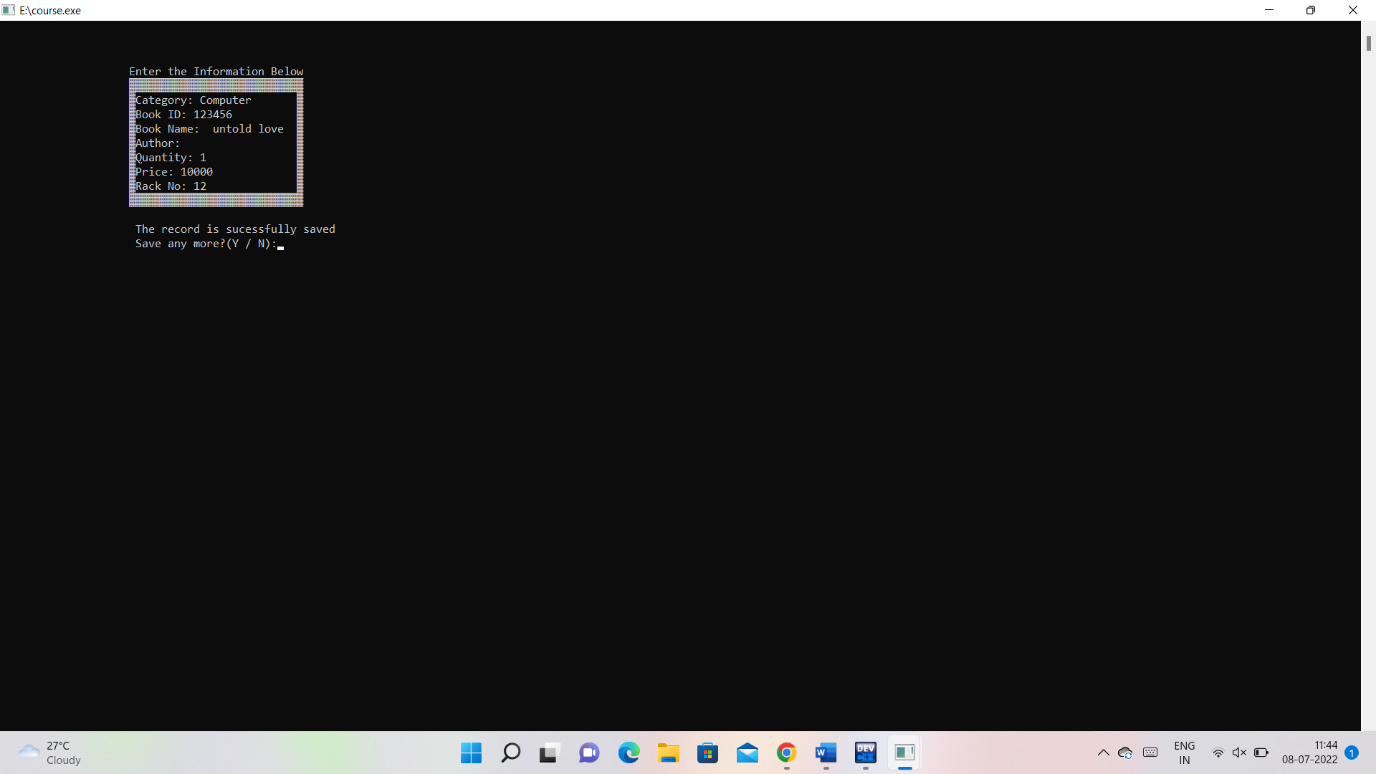
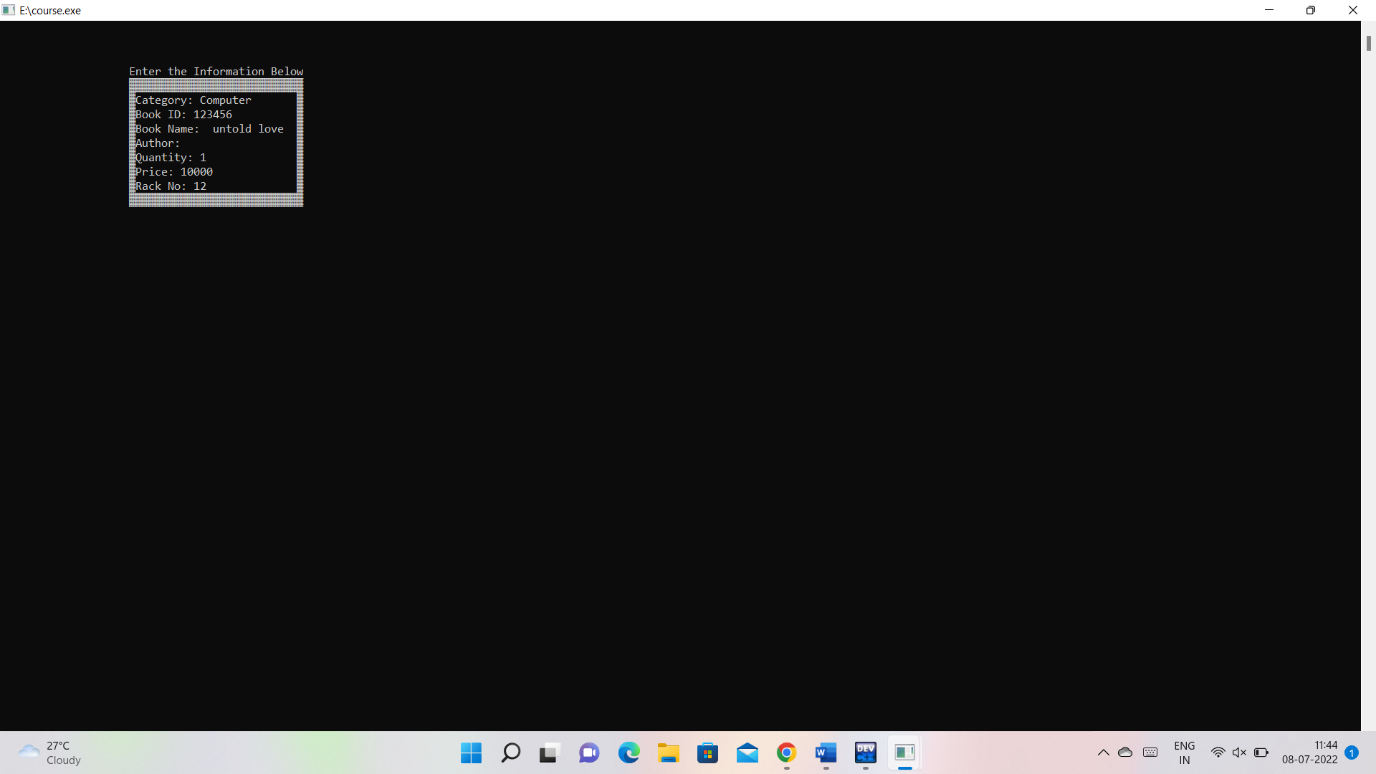
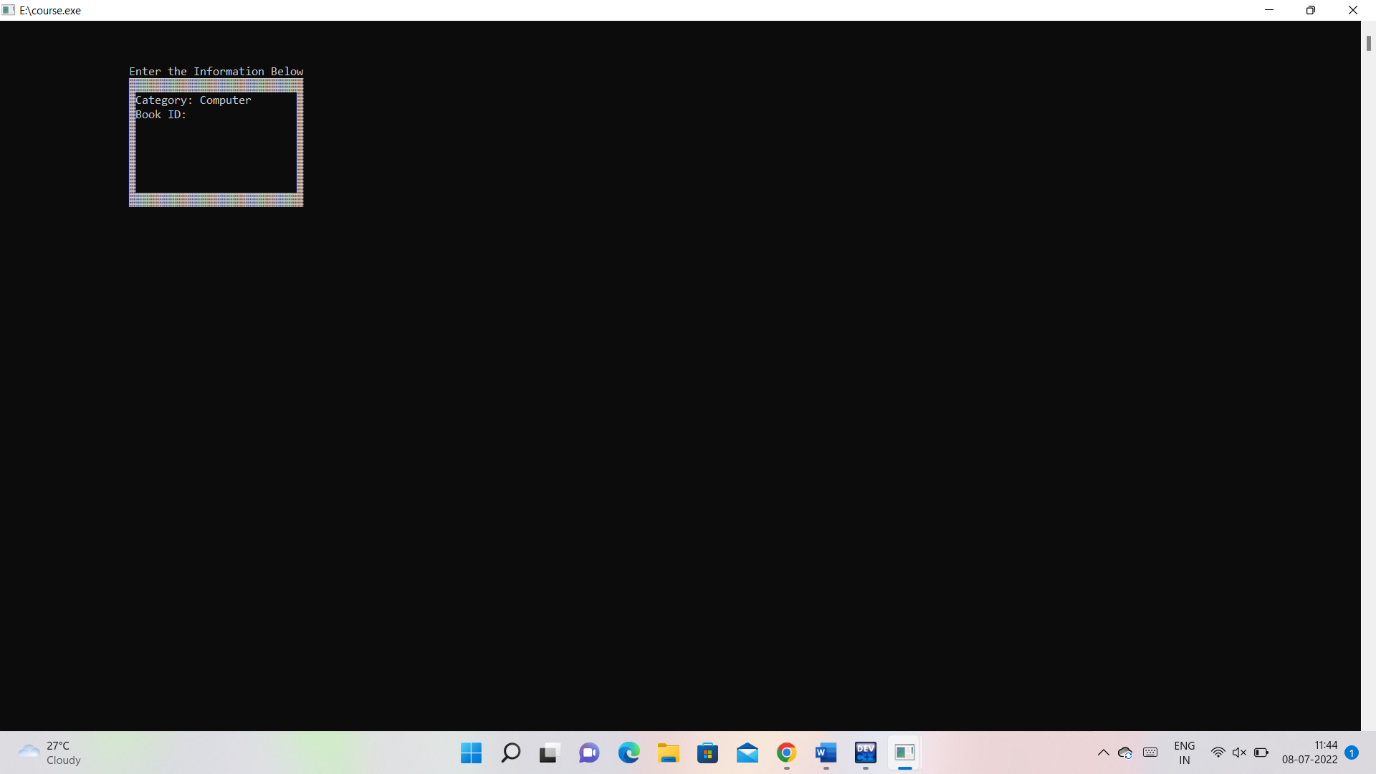
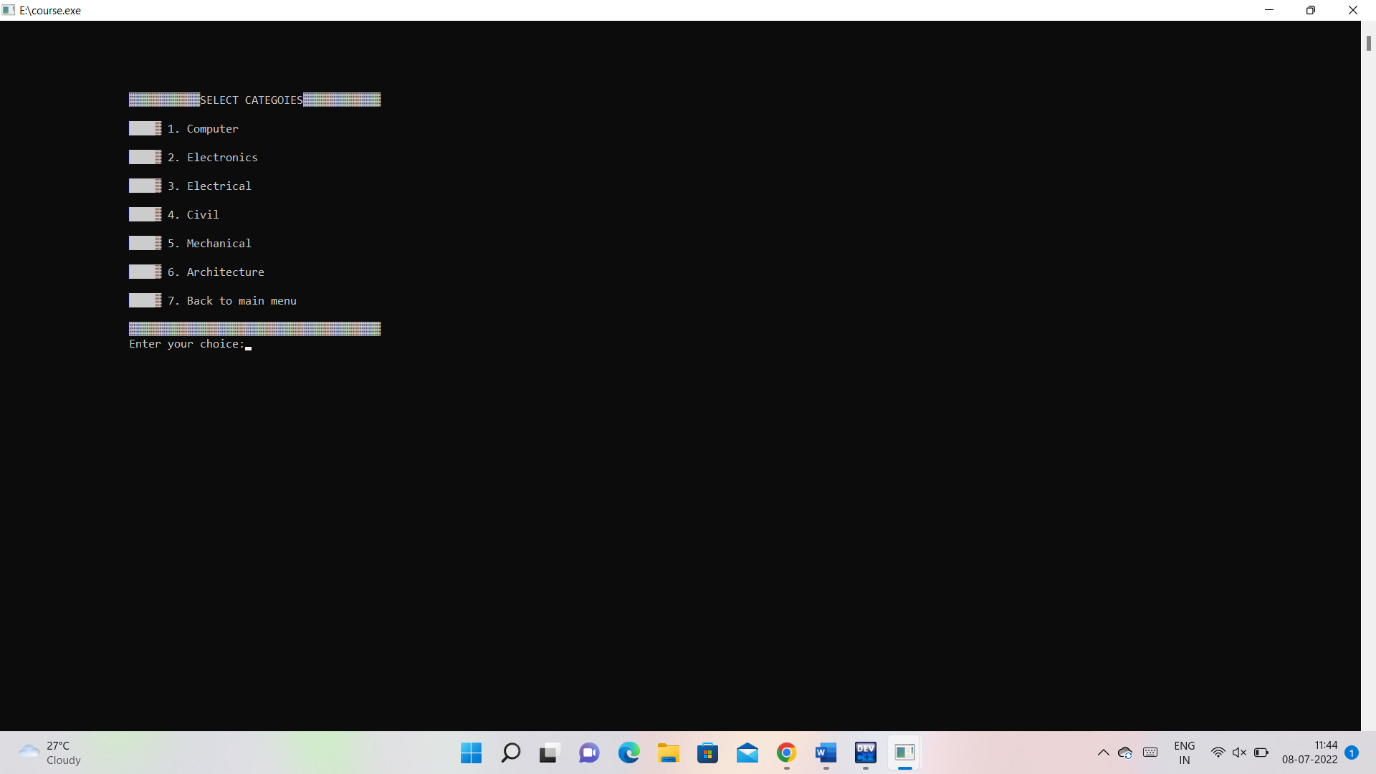
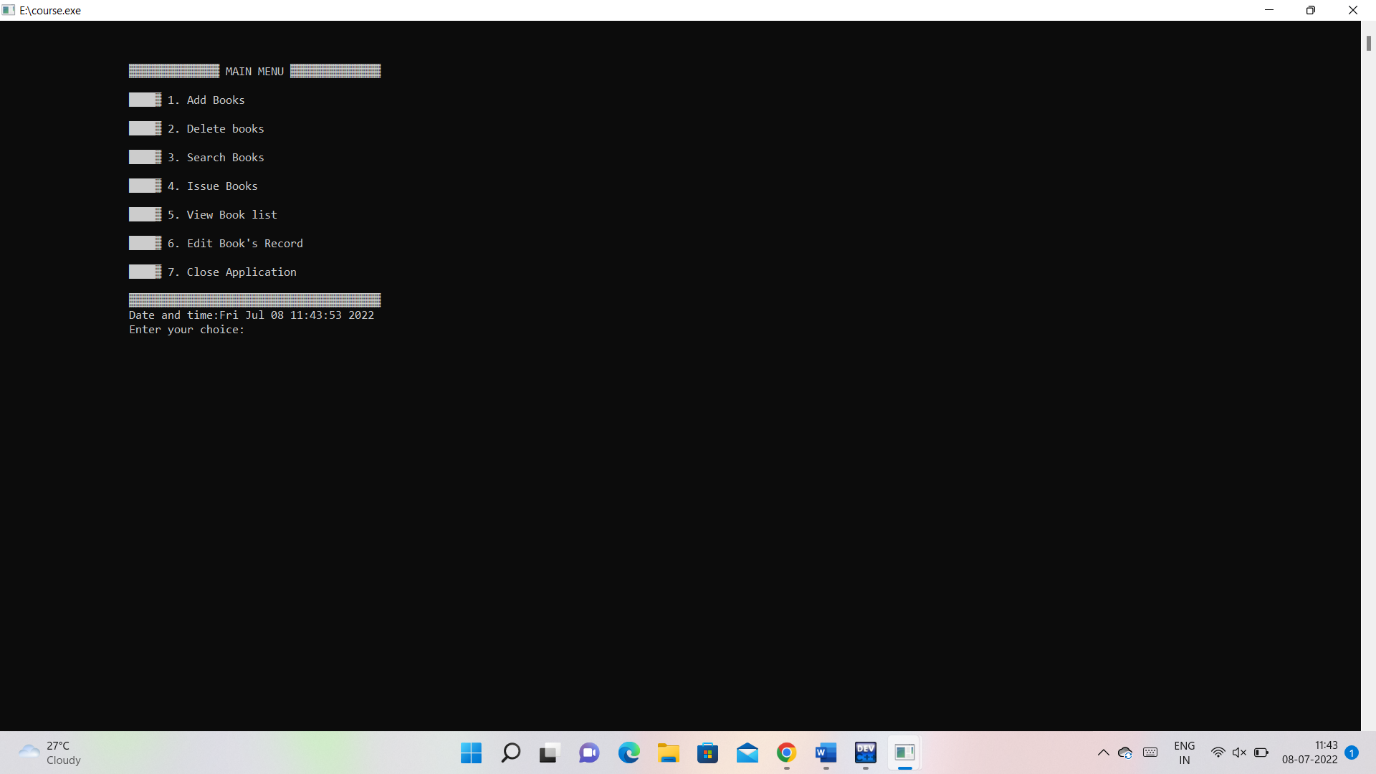
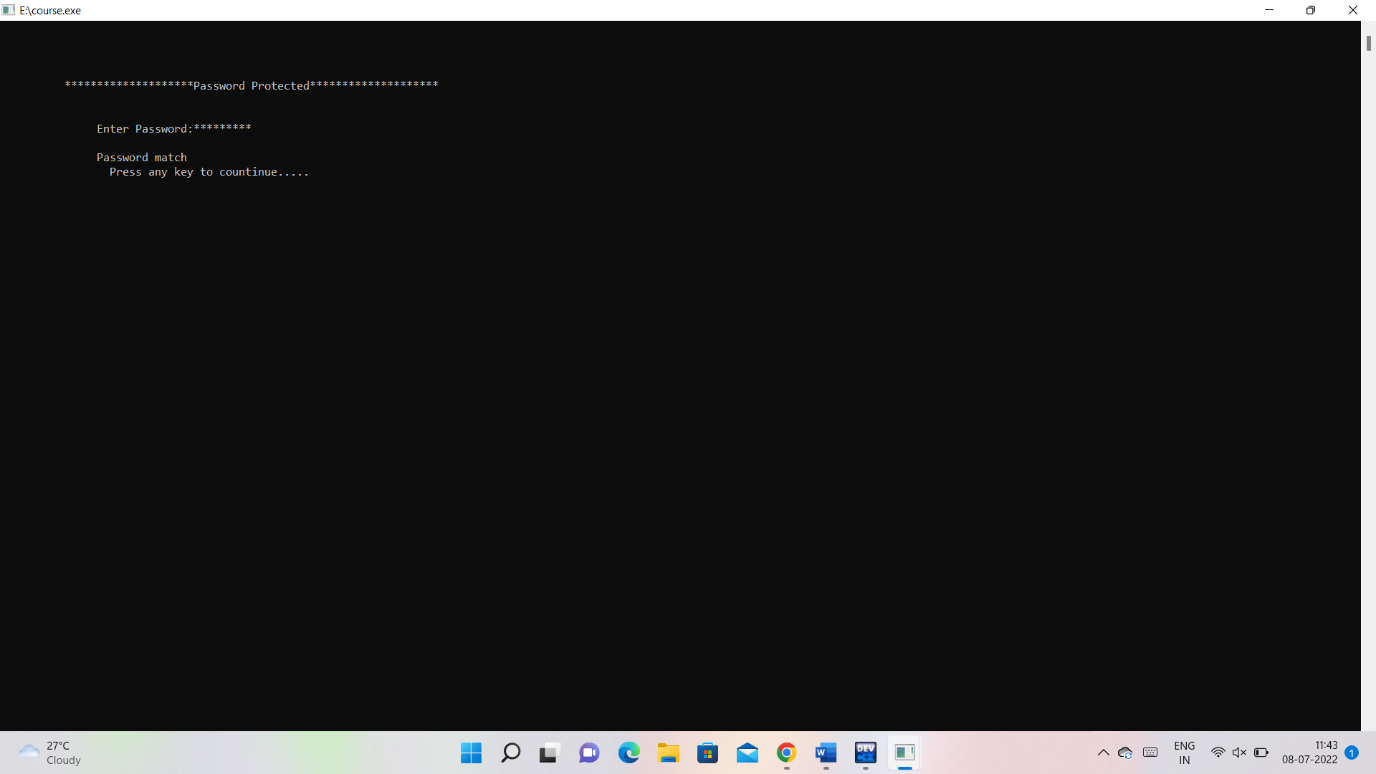
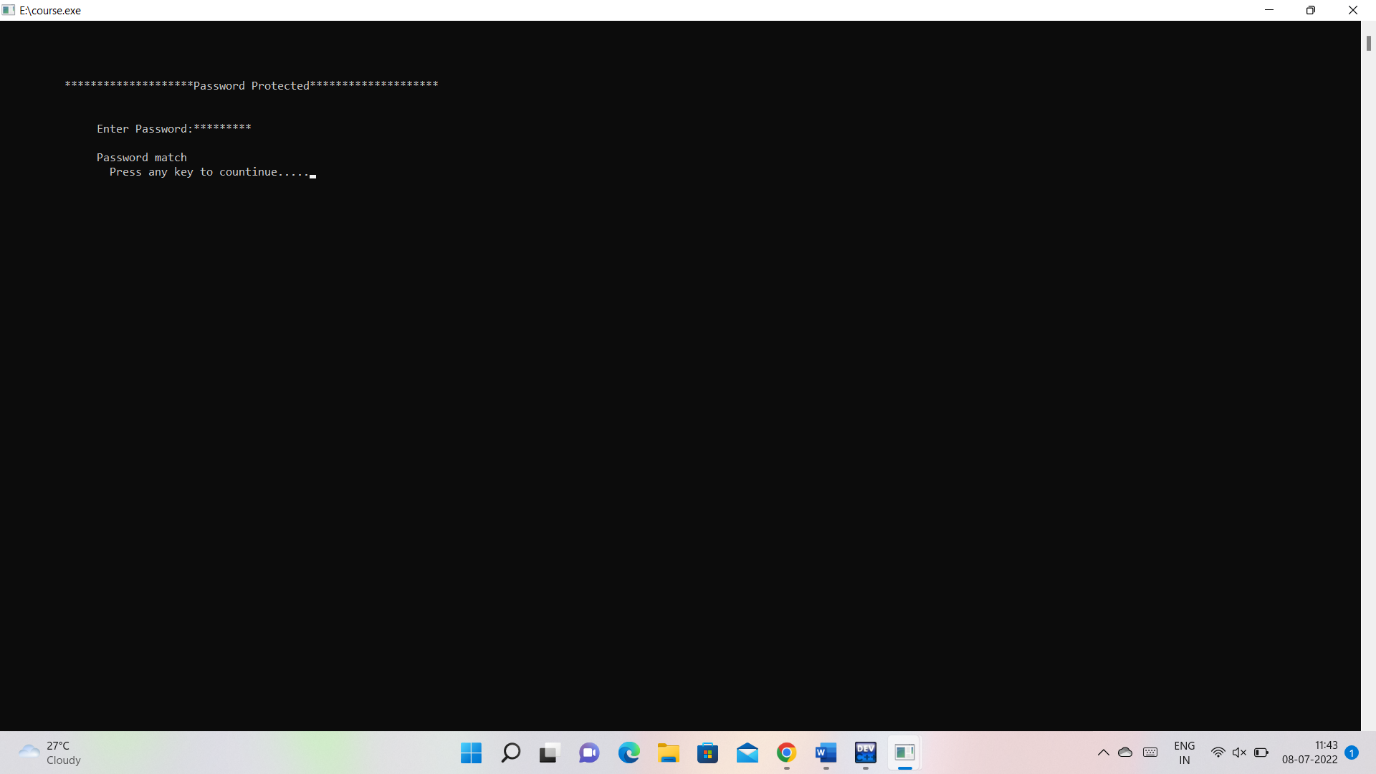
{

Sleep(100);printf("%c",219);}

}\*/

//End of program

**Project Results**

****