//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// PROJECT BOOK LIBRARY

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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// INCLUDED HEADER FILES

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#include <iostream.h>

#include <fstream.h>

#include <process.h>

#include <string.h>

#include <stdlib.h>

#include <stdio.h>

#include <ctype.h>

#include <conio.h>

#include <dos.h>

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS CLASS CONTROL ALL THE FUNCTIONS IN THE MENU

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

class MENU

{

public :

void main\_menu(void) ;

void introduction(void) ;

private :

void edit\_menu(void) ;

void edit\_book(void) ;

void edit\_member(void) ;

} ;

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS CLASS CONTAINS FUNCTIONS RELATED TO BOOKS

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

class BOOK

{

public :

void list(void) ;

char \*bookname(int) ;

protected :

void add\_new\_book(int, char tname[33], char tauthor[26], float, int, int) ;

void update\_copies(int, int, int) ;

void modify(int, char[], char[], float) ;

void deletion(void) ;

int book\_found(int) ;

int bookname\_found(char []) ;

int recordno(int) ;

int available(int) ;

char \*authorname(int) ;

float bookprice(int) ;

int no\_of\_copies(int) ;

int bookcodeof(char[]) ;

void display(int) ;

int reccount(void) ;

void delete\_rec(int) ;

private :

int bookcode, copies ;

char name[33], author[26] ;

float price ;

int avail ;

} ;

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS CLASS CONTAINS FUNCTIONS RELATED TO MEMBERS

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

class MEMBER

{

public :

void list(void) ;

protected :

void add\_mem(int, int, char [], char [], char[], int, int, int) ;

void modify(int, char[], char[], char[]) ;

int member\_found(int) ;

void update\_book(int, int, int, int, int) ;

char \*membername(int) ;

char \*memberphone(int) ;

char \*memberaddress(int) ;

int recordno(int) ;

int lastcode(void) ;

int issued(int) ;

int fine(int) ;

void display(int) ;

void delete\_rec(int) ;

private :

int memcode, bookcode ;

char name[26], phone[10], address[33] ;

int dd, mm, yy ; // DATE OF RETURNING THE BOOK //

} ;

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS IS DERIVED FROM CLASS BOOK & MEMBER AND CONTAINS

// FUNCTIONS FOR WORKING (ISSUE,RETURN,ETC).

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

class WORKING : public BOOK, public MEMBER

{

public :

void issuebook(void) ;

void returnbook(void) ;

void add\_book(void) ;

void add\_member(void) ;

void modify\_book(void) ;

void modify\_member(void) ;

void delete\_book(void) ;

void delete\_member(void) ;

} ;

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS CLASS CONTAINS FUNCTIONS RELATED DATE & FINE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

class DATE

{

public :

void extend\_date(int,int,int,int) ;

int diff(int, int, int, int, int, int) ;

int day, mon, year ;

} ;

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO EXTEND GIVEN DATE BY 15 DAYS

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void DATE :: extend\_date(int d1, int m1, int y1, int days)

{

static int month[] = {31,29,31,30,31,30,31,31,30,31,30,31} ;

for (int i=1; i<=days; i++)

{

d1++ ;

if ((d1 > month[m1-1]) || (y1%4 != 0 && m1 == 2 && d1 > 28))

{

d1 = 1 ;

m1++ ;

}

if (m1 > 12)

{

m1 = 1 ;

y1++ ;

}

}

day = d1 ;

mon = m1 ;

year = y1 ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURN THE DIFFERENCE BETWEEN TWO GIVEN

// DATES

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int DATE :: diff(int d1, int m1, int y1, int d2, int m2, int y2)

{

int days = 0 ;

if ((y2<y1) || (y2==y1 && m2<m1) || (y2==y1 && m2==m1 && d2<d1))

return days ;

static int month[] = {31,29,31,30,31,30,31,31,30,31,30,31} ;

while (d1 != d2 || m1 != m2 || y1 != y2)

{

days++ ;

d1++ ;

if ((d1 > month[m1-1]) || (y1%4 != 0 && m1 == 2 && d1 > 28))

{

d1 = 1 ;

m1++ ;

}

if (m1 > 12)

{

m1 = 1 ;

y1++ ;

}

}

return days ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO DISPLAY MAIN MENU & CONTROL ALL THE FUNCTION

// IN THE MAIN MENU.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void MENU :: main\_menu(void)

{

char ch ;

while (1)

{

clrscr() ;

gotoxy(29,6) ;

cout <<"B O O K L I B R A R Y" ;

gotoxy(29,7) ;

cout <<"~~~~~~~~~~~~~~~~~~~~~~" ;

gotoxy(30,10) ;

cout <<"1. INTRODUCTION" ;

gotoxy(30,11) ;

cout <<"2. ADD NEW BOOK" ;

gotoxy(30,12) ;

cout <<"3. ADD NEW MEMBER" ;

gotoxy(30,13) ;

cout <<"4. ISSUE BOOK" ;

gotoxy(30,14) ;

cout <<"5. RETURN BOOK" ;

gotoxy(30,15) ;

cout <<"6. LIST OF BOOKS" ;

gotoxy(30,16) ;

cout <<"7. LIST OF MEMBERS" ;

gotoxy(30,17) ;

cout <<"8. EDIT" ;

gotoxy(30,18) ;

cout <<"0. QUIT" ;

gotoxy(30,20) ;

cout <<"Enter your choice : " ;

ch = getche() ;

if (ch == 27)

break ;

else

if (ch == '1')

introduction() ;

else

if (ch == '2')

{

WORKING W ;

W.add\_book() ;

}

else

if (ch == '3')

{

WORKING W ;

W.add\_member() ;

}

else

if (ch == '4')

{

WORKING W ;

W.issuebook() ;

}

else

if (ch == '5')

{

WORKING W ;

W.returnbook() ;

}

else

if (ch == '6')

{

BOOK B ;

B.list() ;

}

else

if (ch == '7')

{

MEMBER M ;

M.list() ;

}

else

if (ch == '8')

edit\_menu() ;

else

if (ch == '0')

break ;

}

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO DISPLAY EDIT MENU

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void MENU :: edit\_menu(void)

{

char ch ;

while (1)

{

clrscr() ;

gotoxy(32,9) ;

cout <<"E D I T M E N U";

gotoxy(32,10) ;

cout <<"~~~~~~~~~~~~~~~~" ;

gotoxy(34,13) ;

cout <<"1. BOOKS" ;

gotoxy(34,14) ;

cout <<"2. MEMBERS" ;

gotoxy(34,15) ;

cout <<"0. EXIT" ;

gotoxy(31,17) ;

cout <<"Enter your choice : " ;

ch = getche() ;

if (ch == 27)

break ;

else

if (ch =='1')

edit\_book() ;

else

if (ch == '2')

edit\_member() ;

else

if (ch == '0')

break ;

}

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO DISPLAY EDIT MENU FOR BOOK & CONTROL

// ALL THE FUNCTION IN THE EDIT MENU.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void MENU :: edit\_book(void)

{

char ch ;

while (1)

{

clrscr() ;

gotoxy(31,9) ;

cout <<"E D I T B O O K S";

gotoxy(31,10) ;

cout <<"~~~~~~~~~~~~~~~~~~" ;

gotoxy(34,13) ;

cout <<"1. MODIFY" ;

gotoxy(34,14) ;

cout <<"2. DELETE" ;

gotoxy(34,15) ;

cout <<"0. EXIT" ;

gotoxy(31,17) ;

cout <<"Enter your choice : " ;

ch = getche() ;

if (ch == 27)

break ;

else

if (ch == '1')

{

WORKING W ;

W.modify\_book() ;

}

else

if (ch == '2')

{

WORKING W ;

W.delete\_book() ;

}

else

if (ch == '0')

break ;

}

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO DISPLAY EDIT MENU FOR MEMBERS & CONTROL

// ALL THE FUNCTION IN THE EDIT MENU.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void MENU :: edit\_member(void)

{

char ch ;

while (1)

{

clrscr() ;

gotoxy(29,9) ;

cout <<"E D I T M E M B E R S";

gotoxy(29,10) ;

cout <<"~~~~~~~~~~~~~~~~~~~~~~" ;

gotoxy(34,13) ;

cout <<"1. MODIFY" ;

gotoxy(34,14) ;

cout <<"2. DELETE" ;

gotoxy(34,15) ;

cout <<"0. EXIT" ;

gotoxy(29,17) ;

cout <<"Enter your choice : " ;

ch = getche() ;

if (ch == 27)

break ;

else

if (ch == '1')

{

WORKING W ;

W.modify\_member() ;

}

else

if (ch == '2')

{

WORKING W ;

W.delete\_member() ;

}

else

if (ch == '0')

break ;

}

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// FUNCTION TO DISPLAY THE INTRODUCTION FOR THE PROJECT.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void MENU :: introduction(void)

{

clrscr() ;

gotoxy(31,5) ;

cout <<"Welcome to Project" ;

textcolor(BLACK+BLINK) ; textbackground(WHITE) ;

gotoxy(33,7) ;

cprintf(" BOOK LIBRARY ") ;

textcolor(LIGHTGRAY) ; textbackground(BLACK) ;

gotoxy(15,10) ;

cout <<"This project has facility of maintaining records" ;

gotoxy(15,11) ;

cout <<"of BOOKS and MEMBERS." ;

gotoxy(15,13) ;

cout <<"This project can hold more than 10,000 books" ;

gotoxy(15,14) ;

cout <<"records." ;

gotoxy(15,16) ;

cout <<"One member can issue one book at a time. If he/she" ;

gotoxy(15,17) ;

cout <<"does not return book upto 15 days he/she have to" ;

gotoxy(15,18) ;

cout <<"pay fine of Rs.2/- per day." ;

textcolor(LIGHTGRAY+BLINK) ;

gotoxy(27,24) ;

cprintf("Press any key to continue") ;

textcolor(LIGHTGRAY) ;

getch() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURN 0 IF GIVEN BOOK CODE NOT FOUND

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int BOOK :: book\_found(int tcode)

{

fstream file ;

file.open("BOOK.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

int found=0 ;

while (file.read((char \*) this, sizeof(BOOK)))

{

if (bookcode == tcode)

{

found = 1 ;

break ;

}

}

file.close() ;

return found ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURN 0 IF GIVEN BOOK NAME NOT FOUND

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int BOOK :: bookname\_found(char t1code[33])

{

fstream file ;

file.open("BOOK.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

int found=0 ;

while (file.read((char \*) this, sizeof(BOOK)))

{

if (!strcmpi(name,t1code))

{

found = 1 ;

break ;

}

}

file.close() ;

return found ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURN RECORD NO. FOR THE BOOK CODE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int BOOK :: recordno(int tcode)

{

fstream file ;

file.open("BOOK.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

int count=0 ;

while (file.read((char \*) this, sizeof(BOOK)))

{

count++ ;

if (bookcode == tcode)

break ;

}

file.close() ;

return count ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURNS THE AVAILABLE COPIES FOR THE GIVEN

// BOOK CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int BOOK :: available(int tcode)

{

fstream file ;

file.open("BOOK.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

int tavail=0 ;

while (file.read((char \*) this, sizeof(BOOK)))

{

if (bookcode == tcode)

{

tavail = avail ;

break ;

}

}

file.close() ;

return tavail ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURNS THE NO. OF COPIES FOR THE GIVEN

// BOOK CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int BOOK :: no\_of\_copies(int tcode)

{

fstream file ;

file.open("BOOK.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

int tcopies=0 ;

while (file.read((char \*) this, sizeof(BOOK)))

{

if (bookcode == tcode)

{

tcopies = copies ;

break ;

}

}

file.close() ;

return tcopies ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURNS THE BOOK NAME OF THE GIVEN BOOK

// CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

char \*BOOK :: bookname(int tcode)

{

fstream file ;

file.open("BOOK.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

char tname[33] ;

while (file.read((char \*) this, sizeof(BOOK)))

{

if (bookcode == tcode)

{

strcpy(tname,name) ;

break ;

}

}

file.close() ;

return tname ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURNS THE AUTHOR NAME OF THE GIVEN BOOK

// CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

char \*BOOK :: authorname(int tcode)

{

fstream file ;

file.open("BOOK.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

char tauthor[26] ;

while (file.read((char \*) this, sizeof(BOOK)))

{

if (bookcode == tcode)

{

strcpy(tauthor,author) ;

break ;

}

}

file.close() ;

return tauthor ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURNS THE BOOK PRICE OF THE GIVEN BOOK

// CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

float BOOK :: bookprice(int tcode)

{

fstream file ;

file.open("BOOK.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

float tprice=0.0 ;

while (file.read((char \*) this, sizeof(BOOK)))

{

if (bookcode == tcode)

{

tprice = price ;

break ;

}

}

file.close() ;

return tprice ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURNS THE BOOK CODE OF THE GIVEN BOOK

// NAME.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int BOOK :: bookcodeof(char t1code[33])

{

fstream file ;

file.open("BOOK.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

int tcode=0 ;

while (file.read((char \*) this, sizeof(BOOK)))

{

if (!strcmpi(name,t1code))

{

tcode = bookcode ;

break ;

}

}

file.close() ;

return tcode ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURNS THE NO. OF THE RECORDS IN THE BOOK

// FILE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int BOOK :: reccount(void)

{

fstream file ;

file.open("BOOK.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

int count=0 ;

while (file.read((char \*) this, sizeof(BOOK)))

count++ ;

file.close() ;

return count ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION DELETES THE RECORD OF THE GIVEN BOOK CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void BOOK :: delete\_rec(int tcode)

{

fstream file ;

file.open("BOOK.DAT", ios::in) ;

fstream temp ;

temp.open("temp.dat", ios::out) ;

file.seekg(0,ios::beg) ;

while ( !file.eof() )

{

file.read((char \*) this, sizeof(BOOK)) ;

if ( file.eof() )

break ;

if ( bookcode != tcode )

temp.write((char \*) this, sizeof(BOOK)) ;

}

file.close() ;

temp.close() ;

file.open("BOOK.DAT", ios::out) ;

temp.open("temp.dat", ios::in) ;

temp.seekg(0,ios::beg) ;

while ( !temp.eof() )

{

temp.read((char \*) this, sizeof(BOOK)) ;

if ( temp.eof() )

break ;

file.write((char \*) this, sizeof(BOOK)) ;

}

file.close() ;

temp.close() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION ADD THE RECORD IN THE BOOK FILE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void BOOK :: add\_new\_book(int tcode,char tname[33], char tauthor[26], float tprice, int tcopies, int tavail)

{

fstream file ;

file.open("BOOK.DAT", ios::app) ;

bookcode = tcode ;

strcpy(name,tname) ;

strcpy(author,tauthor) ;

price = tprice ;

copies = tcopies ;

avail = tavail ;

file.write((char \*) this, sizeof(BOOK)) ;

file.close() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION UPDATE THE RECORD IN THE BOOK FILE FOR THE

// GIVEN BOOK CODE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void BOOK :: update\_copies(int tcode, int tcopies, int tavail)

{

fstream file ;

file.open("BOOK.DAT", ios::in) ;

fstream temp ;

temp.open("temp.dat", ios::out) ;

file.seekg(0,ios::beg) ;

while ( !file.eof() )

{

file.read((char \*) this, sizeof(BOOK)) ;

if ( file.eof() )

break ;

if ( bookcode == tcode )

{

copies = tcopies ;

avail = tavail ;

temp.write((char \*) this, sizeof(BOOK)) ;

}

else

temp.write((char \*) this, sizeof(BOOK)) ;

}

file.close() ;

temp.close() ;

file.open("BOOK.DAT", ios::out) ;

temp.open("temp.dat", ios::in) ;

temp.seekg(0,ios::beg) ;

while ( !temp.eof() )

{

temp.read((char \*) this, sizeof(BOOK)) ;

if ( temp.eof() )

break ;

file.write((char \*) this, sizeof(BOOK)) ;

}

file.close() ;

temp.close() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION MODIFY THE RECORD IN THE BOOK FILE FOR THE

// GIVEN BOOK CODE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void BOOK :: modify(int tcode, char tname[33], char tauthor[26], float tprice)

{

fstream file ;

file.open("BOOK.DAT", ios::in) ;

fstream temp ;

temp.open("temp.dat", ios::out) ;

file.seekg(0,ios::beg) ;

while ( !file.eof() )

{

file.read((char \*) this, sizeof(BOOK)) ;

if ( file.eof() )

break ;

if ( bookcode == tcode )

{

strcpy(name,tname) ;

strcpy(author,tauthor) ;

price = tprice ;

temp.write((char \*) this, sizeof(BOOK)) ;

}

else

temp.write((char \*) this, sizeof(BOOK)) ;

}

file.close() ;

temp.close() ;

file.open("BOOK.DAT", ios::out) ;

temp.open("temp.dat", ios::in) ;

temp.seekg(0,ios::beg) ;

while ( !temp.eof() )

{

temp.read((char \*) this, sizeof(BOOK)) ;

if ( temp.eof() )

break ;

file.write((char \*) this, sizeof(BOOK)) ;

}

file.close() ;

temp.close() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION DISPLAY THE RECORD FROM THE BOOK FILE

// FOR THE GIVEN BOOK CODE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void BOOK :: display(int tcode)

{

fstream file ;

file.open("BOOK.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

while (file.read((char \*) this, sizeof(BOOK)))

{

if (bookcode == tcode)

{

gotoxy(5,5) ;

cout <<"Book Code : " <<bookcode ;

gotoxy(5,7) ;

cout <<"Book Name : " <<name ;

gotoxy(5,8) ;

cout <<"Author Name : " <<author ;

gotoxy(5,9) ;

cout <<"Price : Rs." <<price ;

gotoxy(5,10) ;

cout <<"Copies : " <<price ;

gotoxy(5,11) ;

cout <<"Available : " <<avail ;

break ;

}

}

file.close() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION DISPLAY THE LIST OF BOOKS.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void BOOK :: list(void)

{

clrscr() ;

int row = 6 , found=0, flag=0 ;

char ch ;

gotoxy(33,2) ;

cout <<"LIST OF BOOKS" ;

gotoxy(32,3) ;

cout <<"~~~~~~~~~~~~~~~" ;

gotoxy(1,4) ;

cout <<"CODE BOOK NAME AUTHOR PRICE COPIES" ;

gotoxy(1,5) ;

cout <<"~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~" ;

fstream file ;

file.open("BOOK.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

while (file.read((char \*) this, sizeof(BOOK)))

{

flag = 0 ;

delay(20) ;

found = 1 ;

gotoxy(2,row) ;

cout <<bookcode ;

gotoxy(7,row) ;

cout <<name ;

gotoxy(40,row) ;

cout <<author ;

gotoxy(66,row) ;

cout <<price ;

gotoxy(73,row) ;

cout <<copies ;

textbackground(WHITE) ; textcolor(BLACK) ;

gotoxy(40,row+1) ;

cprintf("STATUS: ") ;

textcolor(BLACK+BLINK) ;

cprintf("%d copies available",avail) ;

textbackground(BLACK) ; textcolor(LIGHTGRAY) ;

if ( row == 22 )

{

flag = 1 ;

row = 6 ;

gotoxy(1,25) ;

cout <<"Press any key to continue or Press <ESC> to exit" ;

ch = getch() ;

if (ch == 27)

break ;

clrscr() ;

gotoxy(33,2) ;

cout <<"LIST OF BOOKS" ;

gotoxy(32,3) ;

cout <<"~~~~~~~~~~~~~~~" ;

gotoxy(1,4) ;

cout <<"CODE BOOK NAME AUTHOR PRICE COPIES" ;

gotoxy(1,5) ;

cout <<"~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~" ;

}

else

row = row + 2 ;

}

if (!found)

{

gotoxy(5,10) ;

cout <<"\7Records not found" ;

}

if (!flag)

{

gotoxy(1,25) ;

cout <<"Press any key to continue..." ;

getche() ;

}

file.close () ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURN 0 IF THE GIVEN MEMBER CODE NOT FOUND

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int MEMBER :: member\_found(int mcode)

{

fstream file ;

file.open("MEMBER.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

int found=0 ;

while (file.read((char \*) this, sizeof(MEMBER)))

{

if (memcode == mcode)

{

found = 1 ;

break ;

}

}

file.close() ;

return found ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURN 0 IF THE MEMBER HAVE NOT ISSUED ANY

// BOOK.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int MEMBER :: issued(int mcode)

{

fstream file ;

file.open("MEMBER.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

int missue=0 ;

while (file.read((char \*) this, sizeof(MEMBER)))

{

if (memcode == mcode)

{

missue = bookcode ;

break ;

}

}

file.close() ;

return missue ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION CALCULATE AND RETURN FINE FOR THE GIVEN

// MEMBER CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int MEMBER :: fine(int mcode)

{

DATE D ;

int d1, m1, y1 ;

struct date d;

getdate(&d);

d1 = d.da\_day ;

m1 = d.da\_mon ;

y1 = d.da\_year ;

fstream file ;

file.open("MEMBER.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

int days, t\_fine ;

while (file.read((char \*) this, sizeof(MEMBER)))

{

if (memcode == mcode)

{

days = D.diff(dd,mm,yy,d1,m1,y1) ;

t\_fine = days \* 2 ;

break ;

}

}

file.close() ;

return t\_fine ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURN THE LAST CODE OF THE MEMBER FILE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int MEMBER :: lastcode(void)

{

fstream file ;

file.open("MEMBER.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

int mcode=0 ;

while (file.read((char \*) this, sizeof(MEMBER)))

mcode = memcode ;

file.close() ;

return mcode ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURNS MEMBER NAME OF THE GIVEN MEMBER

// CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

char \*MEMBER :: membername(int mcode)

{

fstream file ;

file.open("MEMBER.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

char mname[26] ;

while (file.read((char \*) this, sizeof(MEMBER)))

{

if (memcode == mcode)

{

strcpy(mname,name) ;

break ;

}

}

file.close() ;

return mname ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURNS MEMBER PHONE OF THE GIVEN MEMBER

// CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

char \*MEMBER :: memberphone(int mcode)

{

fstream file ;

file.open("MEMBER.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

char mphone[10] ;

while (file.read((char \*) this, sizeof(MEMBER)))

{

if (memcode == mcode)

{

strcpy(mphone,phone) ;

break ;

}

}

file.close() ;

return mphone ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURNS MEMBER ADDRESS OF THE GIVEN MEMBER

// CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

char \*MEMBER :: memberaddress(int mcode)

{

fstream file ;

file.open("MEMBER.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

char maddress[33] ;

while (file.read((char \*) this, sizeof(MEMBER)))

{

if (memcode == mcode)

{

strcpy(maddress,address) ;

break ;

}

}

file.close() ;

return maddress ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURNS RECORD NO. OF THE GIVEN MEMBER

// CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

int MEMBER :: recordno(int mcode)

{

fstream file ;

file.open("MEMBER.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

int count=0 ;

while (file.read((char \*) this, sizeof(MEMBER)))

{

count++ ;

if (memcode == mcode)

break ;

}

file.close() ;

return count ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION DELETE RECORD FOR THE GIVEN MEMBER CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void MEMBER :: delete\_rec(int mcode)

{

fstream file ;

file.open("MEMBER.DAT", ios::in) ;

fstream temp ;

temp.open("temp.dat", ios::out) ;

file.seekg(0,ios::beg) ;

while ( !file.eof() )

{

file.read((char \*) this, sizeof(MEMBER)) ;

if ( file.eof() )

break ;

if ( memcode != mcode )

temp.write((char \*) this, sizeof(MEMBER)) ;

}

file.close() ;

temp.close() ;

file.open("MEMBER.DAT", ios::out) ;

temp.open("temp.dat", ios::in) ;

temp.seekg(0,ios::beg) ;

while ( !temp.eof() )

{

temp.read((char \*) this, sizeof(MEMBER)) ;

if ( temp.eof() )

break ;

file.write((char \*) this, sizeof(MEMBER)) ;

}

file.close() ;

temp.close() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION UPDATE RECORD FOR THE GIVEN MEMBER CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void MEMBER :: update\_book(int mcode, int tcode, int d1, int m1, int y1)

{

fstream file ;

file.open("MEMBER.DAT", ios::in) ;

fstream temp ;

temp.open("temp.dat", ios::out) ;

file.seekg(0,ios::beg) ;

while ( !file.eof() )

{

file.read((char \*) this, sizeof(MEMBER)) ;

if ( file.eof() )

break ;

if ( memcode == mcode )

{

bookcode = tcode ;

dd = d1 ;

mm = m1 ;

yy = y1 ;

temp.write((char \*) this, sizeof(MEMBER)) ;

}

else

temp.write((char \*) this, sizeof(MEMBER)) ;

}

file.close() ;

temp.close() ;

file.open("MEMBER.DAT", ios::out) ;

temp.open("temp.dat", ios::in) ;

temp.seekg(0,ios::beg) ;

while ( !temp.eof() )

{

temp.read((char \*) this, sizeof(MEMBER)) ;

if ( temp.eof() )

break ;

file.write((char \*) this, sizeof(MEMBER)) ;

}

file.close() ;

temp.close() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION MODIFY RECORD FOR THE GIVEN MEMBER CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void MEMBER :: modify(int mcode, char mname[26], char mphone[10], char maddress[33])

{

fstream file ;

file.open("MEMBER.DAT", ios::in) ;

fstream temp ;

temp.open("temp.dat", ios::out) ;

file.seekg(0,ios::beg) ;

while ( !file.eof() )

{

file.read((char \*) this, sizeof(MEMBER)) ;

if ( file.eof() )

break ;

if ( memcode == mcode )

{

strcpy(name,mname) ;

strcpy(phone,mphone) ;

strcpy(address,maddress) ;

temp.write((char \*) this, sizeof(MEMBER)) ;

}

else

temp.write((char \*) this, sizeof(MEMBER)) ;

}

file.close() ;

temp.close() ;

file.open("MEMBER.DAT", ios::out) ;

temp.open("temp.dat", ios::in) ;

temp.seekg(0,ios::beg) ;

while ( !temp.eof() )

{

temp.read((char \*) this, sizeof(MEMBER)) ;

if ( temp.eof() )

break ;

file.write((char \*) this, sizeof(MEMBER)) ;

}

file.close() ;

temp.close() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION ADD RECORD IN THE FILE FOR THE GIVEN

// MEMBER CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void MEMBER :: add\_mem(int mcode, int bcode, char mname[26], char maddress[33], char mphone[10], int d1, int m1, int y1)

{

fstream file ;

file.open("MEMBER.DAT", ios::app) ;

memcode = mcode ;

bookcode = bcode ;

strcpy(name,mname) ;

strcpy(address,maddress) ;

strcpy(phone,mphone) ;

dd = d1 ;

mm = m1 ;

yy = y1 ;

file.write((char \*) this, sizeof(MEMBER)) ;

file.close() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION DISPLAY THE RECORD FOR THE GIVEN MEMBER

// CODE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void MEMBER :: display(int mcode)

{

fstream file ;

file.open("MEMBER.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

while (file.read((char \*) this, sizeof(MEMBER)))

{

if (memcode == mcode)

{

gotoxy(5,3) ;

cout <<"Member Code # " <<mcode ;

gotoxy(5,4) ;

cout <<"~~~~~~~~~~~~~~~~~" ;

gotoxy(5,6) ;

cout <<"Name : " <<name ;

gotoxy(5,7) ;

cout <<"Phone : " <<phone ;

gotoxy(5,8) ;

cout <<"Address : " <<address ;

break ;

}

}

file.close() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION DISPLAY THE LIST OF THE MEMBERS

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void MEMBER :: list(void)

{

clrscr() ;

BOOK B ;

int row = 6 , found=0, flag=0 ;

char ch ;

gotoxy(32,2) ;

cout <<"LIST OF MEMBERS" ;

gotoxy(31,3) ;

cout <<"~~~~~~~~~~~~~~~~~" ;

gotoxy(1,4) ;

cout <<"CODE BOOK CODE NAME PHONE" ;

gotoxy(1,5) ;

cout <<"~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~" ;

fstream file ;

file.open("MEMBER.DAT", ios::in) ;

file.seekg(0,ios::beg) ;

while (file.read((char \*) this, sizeof(MEMBER)))

{

flag = 0 ;

delay(20) ;

found = 1 ;

gotoxy(2,row) ;

cout <<memcode ;

gotoxy(10,row) ;

cout <<bookcode ;

gotoxy(19,row) ;

cout <<name ;

gotoxy(48,row) ;

cout <<phone ;

textbackground(WHITE) ; textcolor(BLACK) ;

gotoxy(7,row+1) ;

if (bookcode == 0)

cprintf("BOOK NAME: (Not Issued)") ;

else

{

cprintf("BOOK NAME: %s",B.bookname(bookcode)) ;

gotoxy(42,row+1) ;

cprintf("Date of return: ") ;

textcolor(BLACK+BLINK) ;

cprintf("%d/%d/%d",dd,mm,yy) ;

}

textbackground(BLACK) ; textcolor(LIGHTGRAY) ;

if ( row == 22 )

{

flag = 1 ;

row = 6 ;

gotoxy(1,25) ;

cout <<"Press any key to continue or Press <ESC> to exit" ;

ch = getch() ;

if (ch == 27)

break ;

clrscr() ;

gotoxy(32,2) ;

cout <<"LIST OF MEMBERS" ;

gotoxy(31,3) ;

cout <<"~~~~~~~~~~~~~~~~~" ;

gotoxy(1,4) ;

cout <<"CODE BOOK CODE NAME PHONE" ;

gotoxy(1,5) ;

cout <<"~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~" ;

}

else

row = row + 2 ;

}

if (!found)

{

gotoxy(5,10) ;

cout <<"\nRecords not found" ;

}

if (!flag)

{

gotoxy(1,25) ;

cout <<"Press any key to continue..." ;

getche() ;

}

file.close () ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION GIVES DATA TO ADD RECORD IN THE BOOK FILE.

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void WORKING :: add\_book(void)

{

if (!reccount()) // MEMBER FUNCTION OF BOOK

{

add\_new\_book(0,"null","null",0.0,0,0) ;

BOOK::delete\_rec(0) ;

}

char ch ;

int tcode, tcopies, tavail ;

char tname[33], tauthor[26] ;

float tprice=0.0 ;

do

{

int found=0, valid=0 ;

int tc ;

float t2=0.0 ;

char t[10], t1[10] ;

clrscr() ;

gotoxy(29,3) ;

cout <<"ADDITION OF THE BOOKS" ;

gotoxy(29,4) ;

cout <<"~~~~~~~~~~~~~~~~~~~~~" ;

gotoxy(72,1) ;

cout <<"<0>=Exit" ;

gotoxy(5,25) ;

cout <<"Enter code no. of the book" ;

gotoxy(5,5) ;

cout <<"Code no. " ;

gets(t) ;

tc = atoi(t) ;

tcode = tc ;

if (tcode == 0)

return ;

if (book\_found(tcode))

{

found = 1 ;

gotoxy(19,8) ;

cout <<bookname(tcode) ;

gotoxy(19,9) ;

cout <<authorname(tcode) ;

gotoxy(22,10) ;

cout <<bookprice(tcode) ;

}

gotoxy(5,8) ;

cout <<"Book Name : " ;

gotoxy(5,9) ;

cout <<"Author Name : " ;

gotoxy(5,10) ;

cout <<"Price : Rs." ;

gotoxy(5,12) ;

cout <<"Copies : " ;

valid = 0 ;

while (!valid && !found)

{

valid = 1 ;

gotoxy(5,25) ; clreol() ;

cout <<"Enter the name of the book" ;

gotoxy(19,8) ; clreol() ;

gets(tname) ;

strupr(tname) ;

if (tname[0] == '0')

return ;

if (strlen(tname) < 1 || strlen(tname) > 32)

{

valid = 0 ;

gotoxy(5,25) ; clreol() ;

cout <<"\nEnter correctly (Range: 1..32)" ;

getch() ;

}

}

valid = 0 ;

while (!valid && !found)

{

valid = 1 ;

gotoxy(5,25) ; clreol() ;

cout <<"Enter the author's name of the book" ;

gotoxy(19,9) ; clreol() ;

gets(tauthor) ;

strupr(tauthor) ;

if (tauthor[0] == '0')

return ;

if (strlen(tauthor) < 1 || strlen(tauthor) > 25)

{

valid = 0 ;

gotoxy(5,25) ; clreol() ;

cout <<"\7Enter correctly (Range: 1..25)" ;

getch() ;

}

}

valid = 0 ;

while (!valid && !found)

{

valid = 1 ;

gotoxy(5,25) ; clreol() ;

cout <<"Enter the price of the book" ;

gotoxy(22,10) ; clreol() ;

gets(t1) ;

t2 = atof(t1) ;

tprice = t2 ;

if (t1[0] == '0')

return ;

if (tprice < 1 || tprice > 9999)

{

valid = 0 ;

gotoxy(5,25) ; clreol() ;

cout <<"\7Enter correctly" ;

getch() ;

}

}

valid = 0 ;

while (!valid)

{

valid = 1 ;

gotoxy(5,25) ; clreol() ;

cout <<"Enter no. of copies of book to be added" ;

gotoxy(19,12) ; clreol() ;

gets(t) ;

tc = atoi(t) ;

tcopies = tc ;

if (t[0] == '0')

return ;

if (tcopies < 1 || tcopies > 50)

{

valid = 0 ;

gotoxy(5,25) ; clreol() ;

cout <<"\7Enter correctly" ;

getch() ;

}

}

tavail = available(tcode) + tcopies ;

tcopies = no\_of\_copies(tcode) + tcopies ;

gotoxy(5,25) ; clreol() ;

do

{

gotoxy(5,15) ; clreol() ;

cout <<"Do you want to save (y/n) : " ;

ch = getche() ;

ch = toupper(ch) ;

} while (ch != 'Y' && ch != 'N') ;

if (ch == 'Y')

{

if (found)

update\_copies(tcode,tcopies,tavail) ;

else

add\_new\_book(tcode,tname,tauthor,tprice,tcopies,tavail) ;

}

do

{

gotoxy(5,17) ; clreol() ;

cout <<"Do you want to add more (y/n) : " ;

ch = getche() ;

ch = toupper(ch) ;

} while (ch != 'Y' && ch != 'N') ;

} while (ch == 'Y') ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION GIVES DATA TO ADD RECORD IN THE MEMBER FILE

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void WORKING :: add\_member(void)

{

char ch ;

int mcode, bcode ;

char mname[26], mphone[10], maddress[33] ;

int d1, m1, y1 ;

mcode = lastcode() ;

if (mcode == 0)

{

add\_mem(mcode,0,"null","null","null",0,0,0) ;

MEMBER::delete\_rec(mcode) ;

}

mcode++ ;

do

{

int valid=0 ;

clrscr() ;

gotoxy(28,3) ;

cout <<"ADDITION OF THE MEMBERS" ;

gotoxy(28,4) ;

cout <<"~~~~~~~~~~~~~~~~~~~~~~~" ;

gotoxy(72,1) ;

cout <<"<0>=Exit" ;

gotoxy(5,7) ;

cout <<"Member Code # " <<mcode ;

gotoxy(5,8) ;

cout <<"~~~~~~~~~~~~~~~~~" ;

gotoxy(5,10) ;

cout <<"Name : " ;

gotoxy(5,12) ;

cout <<"Phone : " ;

gotoxy(5,14) ;

cout <<"Address : " ;

do

{

valid = 1 ;

gotoxy(5,25) ; clreol() ;

cout <<"Enter the name of the New Member" ;

gotoxy(15,10) ; clreol() ;

gets(mname) ;

strupr(mname) ;

if (mname[0] == '0')

return ;

if (strlen(mname) < 1 || strlen(mname) > 25)

{

valid = 0 ;

gotoxy(5,25) ; clreol() ;

cout <<"\7Enter correctly (Range: 1..25)" ;

getch() ;

}

} while (!valid) ;

do

{

valid = 1 ;

gotoxy(5,25) ; clreol() ;

cout <<"Enter Phone no. of the Member or Press <ENTER> for none" ;

gotoxy(15,12) ; clreol() ;

gets(mphone) ;

if (mphone[0] == '0')

return ;

if ((strlen(mphone) < 7 && strlen(mphone) > 0) || (strlen(mphone) > 9))

{

valid = 0 ;

gotoxy(5,25) ; clreol() ;

cout <<"\7Enter correctly" ;

getch() ;

}

} while (!valid) ;

if (strlen(mphone) == 0)

strcpy(mphone,"-") ;

do

{

valid = 1 ;

gotoxy(5,25) ; clreol() ;

cout <<"Enter the address of the New Member" ;

gotoxy(15,14) ; clreol() ;

gets(maddress) ;

strupr(maddress) ;

if (maddress[0] == '0')

return ;

if (strlen(maddress) < 1 || strlen(maddress) > 32)

{

valid = 0 ;

gotoxy(5,25) ; clreol() ;

cout <<"\7Enter correctly (Range: 1..32)" ;

getch() ;

}

} while (!valid) ;

gotoxy(5,25) ; clreol() ;

do

{

gotoxy(5,17) ; clreol() ;

cout <<"Do you want to save (y/n) : " ;

ch = getche() ;

ch = toupper(ch) ;

if (ch == '0')

return ;

} while (ch != 'Y' && ch != 'N') ;

if (ch == 'Y')

{

bcode = 0 ;

d1 = 0 ;

m1 = 0 ;

y1 = 0 ;

add\_mem(mcode,bcode,mname,maddress,mphone,d1,m1,y1) ;

mcode++ ;

}

do

{

gotoxy(5,19) ; clreol() ;

cout <<"Do you want to add more (y/n) : " ;

ch = getche() ;

ch = toupper(ch) ;

if (ch == '0')

return ;

} while (ch != 'Y' && ch != 'N') ;

} while (ch == 'Y') ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION ISSUES THE BOOK

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void WORKING :: issuebook(void)

{

BOOK B ;

MEMBER M ;

DATE D ;

char t1code[33], ch ;

int t2code=0, tcode=0, mcode=0 ;

int valid ;

int d1, m1, y1 ;

struct date d;

getdate(&d);

d1 = d.da\_day ;

m1 = d.da\_mon ;

y1 = d.da\_year ;

do

{

valid = 1 ;

while (1)

{

clrscr() ;

gotoxy(5,2) ;

cout <<"Date : " <<d1 <<"/" <<m1 <<"/" <<y1 ;

gotoxy(72,1) ;

cout <<"<0>=Exit" ;

gotoxy(5,5) ;

cout <<"Enter Code or Name of the Book to be issued" ;

gotoxy(5,6) ;

cout <<" or " ;

gotoxy(5,7) ;

cout <<"Press <ENTER> for help " ;

gets(t1code) ;

if (t1code[0] == '0')

return ;

if (strlen(t1code) == 0)

B.list() ;

else

break ;

}

t2code = atoi(t1code) ;

tcode = t2code ;

if ((tcode == 0 && !bookname\_found(t1code)) || (tcode != 0 && !book\_found(tcode)))

{

valid = 0 ;

gotoxy(5,10) ;

cout <<"\7Record not found" ;

gotoxy(5,11) ;

cout <<"Press <ESC> to exit or any other key to continue..." ;

ch = getch() ;

if (ch == 27)

return ;

}

} while (!valid) ;

if (tcode == 0)

tcode = bookcodeof(t1code) ;

if (!available(tcode))

{

gotoxy(5,10) ;

cout <<"\7Sorry! Book (" <<bookname(tcode) <<") is not available" ;

gotoxy(5,11) ;

cout <<"Kindly issue any other Book" ;

gotoxy(5,12) ;

cout <<"See List of Books" ;

getch() ;

return ;

}

do

{

valid = 1 ;

while (1)

{

clrscr() ;

gotoxy(72,1) ;

cout <<"<0>=Exit" ;

gotoxy(5,2) ;

cout <<"Date : " <<d1 <<"/" <<m1 <<"/" <<y1 ;

gotoxy(5,5) ;

cout <<"Book Name: " <<bookname(tcode) ;

gotoxy(5,7) ;

cout <<"Enter Code no. of the Member" ;

gotoxy(5,8) ;

cout <<" or " ;

gotoxy(5,9) ;

cout <<"Press <ENTER> for help " ;

gets(t1code) ;

if (t1code[0] == '0')

return ;

if (strlen(t1code) == 0)

M.list() ;

else

break ;

}

t2code = atoi(t1code) ;

mcode = t2code ;

if (mcode == 0)

{

valid = 0 ;

gotoxy(5,25) ;

cout <<"\7Enter Correctly" ;

getch() ;

}

if (!member\_found(mcode) && valid)

{

valid = 0 ;

gotoxy(5,13) ;

cout <<"\7Record not found" ;

gotoxy(5,14) ;

cout <<"Press <ESC> to exit or any other key to continue..." ;

ch = getch() ;

if (ch == 27)

return ;

}

} while (!valid) ;

int tcopies, tavail ;

tcopies = no\_of\_copies(tcode) ; // member function of BOOK

tavail = available(tcode) - 1 ; // member function of BOOK

update\_copies(tcode,tcopies,tavail) ; // member function of BOOK

D.extend\_date(d1,m1,y1,15) ;

d1 = D.day ;

m1 = D.mon ;

y1 = D.year ;

update\_book(mcode,tcode,d1,m1,y1) ; // member function of MEMBER

gotoxy(5,13) ;

cout <<"\7Book is issued to " <<membername(mcode) ;

gotoxy(5,15) ;

cout <<"Date of Return : " <<d1 <<"/" <<m1 <<"/" <<y1 ;

getch() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION RETURNS THE BOOK FOR THE MEMBER

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void WORKING :: returnbook(void)

{

MEMBER M ;

char t1code[5], ch ;

int t2code=0, mcode=0, valid ;

int d1, m1, y1 ;

struct date d;

getdate(&d);

d1 = d.da\_day ;

m1 = d.da\_mon ;

y1 = d.da\_year ;

do

{

valid = 1 ;

while (1)

{

clrscr() ;

gotoxy(72,1) ;

cout <<"<0>=Exit" ;

gotoxy(5,2) ;

cout <<"Date : " <<d1 <<"/" <<m1 <<"/" <<y1 ;

gotoxy(5,7) ;

cout <<"Enter Code no. of the Member who wants to return book" ;

gotoxy(5,8) ;

cout <<" or " ;

gotoxy(5,9) ;

cout <<"Press <ENTER> for help " ;

gets(t1code) ;

if (t1code[0] == '0')

return ;

if (strlen(t1code) == 0)

M.list() ;

else

break ;

}

t2code = atoi(t1code) ;

mcode = t2code ;

if (mcode == 0)

{

valid = 0 ;

gotoxy(5,25) ;

cout <<"\7Enter Correctly" ;

getch() ;

}

if (!member\_found(mcode) && valid)

{

valid = 0 ;

gotoxy(5,13) ;

cout <<"\7Record not found" ;

gotoxy(5,14) ;

cout <<"Press <ESC> to exit or any other key to continue..." ;

ch = getch() ;

if (ch == 27)

return ;

}

if (!issued(mcode) && valid)

{

valid = 0 ;

gotoxy(5,13) ;

cout <<"\7Member have no book to return" ;

gotoxy(5,14) ;

cout <<"Press <ESC> to exit or any other key to continue..." ;

ch = getch() ;

if (ch == 27)

return ;

}

} while (!valid) ;

int bcode, tcopies, tavail ;

bcode = issued(mcode) ;

gotoxy(5,13) ;

cout <<"Book Code : " <<bcode ;

gotoxy(5,14) ;

cout <<"Book Name : " <<bookname(bcode) ;

tcopies = no\_of\_copies(bcode) ;

tavail = available(bcode) + 1 ;

int f ;

f = fine(mcode) ;

if (f != 0)

{

gotoxy(5,16) ;

cout <<"You have to pay a fine of Rs." <<f ;

gotoxy(5,17) ;

cout <<"Please do not delay the Return of Book again" ;

}

update\_copies(bcode,tcopies,tavail) ;

update\_book(mcode,0,0,0,0) ;

gotoxy(5,19) ;

cout <<"\7Book has been returned" ;

getch() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION GIVES DATA TO MODIFY THE BOOK RECORD

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void WORKING :: modify\_book(void)

{

BOOK B ;

char t1code[5], tname[33], tauthor[26], \*t1, ch ;

int t2code=0, tcode=0 ;

float t2=0.0, tprice=0.0 ;

int valid ;

do

{

valid = 1 ;

while (1)

{

clrscr() ;

gotoxy(72,1) ;

cout <<"<0>=Exit" ;

gotoxy(5,5) ;

cout <<"Enter Code or Name of the Book to be modified" ;

gotoxy(5,6) ;

cout <<" or " ;

gotoxy(5,7) ;

cout <<"Press <ENTER> for help " ;

gets(t1code) ;

if (t1code[0] == '0')

return ;

if (strlen(t1code) == 0)

B.list() ;

else

break ;

}

t2code = atoi(t1code) ;

tcode = t2code ;

if ((tcode == 0 && !bookname\_found(t1code)) || (tcode != 0 && !book\_found(tcode)))

{

valid = 0 ;

gotoxy(5,10) ;

cout <<"\7Record not found" ;

gotoxy(5,11) ;

cout <<"Press <ESC> to exit or any other key to continue..." ;

ch = getch() ;

if (ch == 27)

return ;

}

} while (!valid) ;

if (tcode == 0)

tcode = bookcodeof(t1code) ;

clrscr() ;

gotoxy(72,1) ;

cout <<"<0>=Exit" ;

BOOK::display(tcode) ;

do

{

gotoxy(5,13) ; clreol() ;

cout <<"Do you want to modify this record (y/n) : " ;

ch = getche() ;

ch = toupper(ch) ;

if (ch == '0')

return ;

} while (ch != 'Y' && ch != 'N') ;

if (ch == 'N')

return ;

gotoxy(5,16) ;

cout <<"Book Name : " ;

gotoxy(5,17) ;

cout <<"Author Name : " ;

gotoxy(5,18) ;

cout <<"Price : Rs." ;

do

{

valid = 1 ;

gotoxy(5,25) ; clreol() ;

cout <<"Enter the name of the book or <ENTER> for no change" ;

gotoxy(19,16) ; clreol() ;

gets(tname) ;

strupr(tname) ;

if (tname[0] == '0')

return ;

if (strlen(tname) > 32)

{

valid = 0 ;

gotoxy(5,25) ; clreol() ;

cout <<"\7Enter correctly (Range: 1..32)" ;

getch() ;

}

} while (!valid) ;

if (strlen(tname) == 0)

strcpy(tname,bookname(tcode)) ;

do

{

valid = 1 ;

gotoxy(5,25) ; clreol() ;

cout <<"Enter the author's name or <ENTER> for no change" ;

gotoxy(19,17) ; clreol() ;

gets(tauthor) ;

strupr(tauthor) ;

if (tauthor[0] == '0')

return ;

if (strlen(tauthor) > 25)

{

valid = 0 ;

gotoxy(5,25) ; clreol() ;

cout <<"\nEnter correctly (Range: 1..25)" ;

getch() ;

}

} while (!valid) ;

if (strlen(tauthor) == 0)

strcpy(tauthor,authorname(tcode)) ;

do

{

valid = 1 ;

gotoxy(5,25) ; clreol() ;

cout <<"Enter price or <ENTER> for no change" ;

gotoxy(22,18) ; clreol() ;

gets(t1) ;

t2 = atof(t1) ;

tprice = t2 ;

if (t1[0] == '0')

return ;

if (strlen(t1) == 0)

break ;

if (tprice < 1 || tprice > 9999)

{

valid = 0 ;

gotoxy(5,25) ; clreol() ;

cout <<"\nEnter correctly" ;

getch() ;

}

} while (!valid) ;

if (strlen(t1) == 0)

tprice = bookprice(tcode) ;

gotoxy(5,25) ; clreol() ;

do

{

gotoxy(5,20) ; clreol() ;

cout <<"Do you want to save changes (y/n) : " ;

ch = getche() ;

ch = toupper(ch) ;

if (ch == '0')

return ;

} while (ch != 'Y' && ch != 'N') ;

if (ch == 'N')

return ;

BOOK::modify(tcode,tname,tauthor,tprice) ;

gotoxy(5,23) ;

cout <<"\nRecord Modified" ;

getch() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION GIVES DATA TO MODIFY THE MEMBER RECORD

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void WORKING :: modify\_member(void)

{

MEMBER M ;

char m1code[10], mname[26], mphone[10], maddress[33], ch ;

int m2code=0, mcode=0 ;

int valid ;

do

{

valid = 1 ;

while (1)

{

clrscr() ;

gotoxy(72,1) ;

cout <<"<0>=Exit" ;

gotoxy(5,7) ;

cout <<"Enter Code no. of the Member to be Modify" ;

gotoxy(5,8) ;

cout <<" or " ;

gotoxy(5,9) ;

cout <<"Press <ENTER> for help " ;

gets(m1code) ;

m2code = atoi(m1code) ;

mcode = m2code ;

if (m1code[0] == '0')

return ;

if (strlen(m1code) == 0)

M.list() ;

else

break ;

}

if (mcode == 0)

{

valid = 0 ;

gotoxy(5,25) ;

cout <<"\7Enter Correctly" ;

getch() ;

}

if (valid && !member\_found(mcode))

{

valid = 0 ;

gotoxy(5,13) ;

cout <<"\7Record not found" ;

gotoxy(5,14) ;

cout <<"Press <ESC> to exit or any other key to continue..." ;

ch = getch() ;

if (ch == 27)

return ;

}

} while (!valid) ;

clrscr() ;

gotoxy(72,1) ;

cout <<"<0>=Exit" ;

MEMBER::display(mcode) ;

do

{

gotoxy(5,10) ; clreol() ;

cout <<"Do you want to modify this record (y/n) : " ;

ch = getche() ;

ch = toupper(ch) ;

if (ch == '0')

return ;

} while (ch != 'Y' && ch != 'N') ;

if (ch == 'N')

return ;

gotoxy(5,13) ;

cout <<"Name : " ;

gotoxy(5,14) ;

cout <<"Phone : " ;

gotoxy(5,15) ;

cout <<"Address : " ;

do

{

valid = 1 ;

gotoxy(5,25) ; clreol() ;

cout <<"Enter the name of the member or <ENTER> for no change" ;

gotoxy(19,13) ; clreol() ;

gets(mname) ;

strupr(mname) ;

if (mname[0] == '0')

return ;

if (strlen(mname) > 25)

{

valid = 0 ;

gotoxy(5,25) ; clreol() ;

cout <<"\7Enter correctly (Range: 1..25)" ;

getch() ;

}

}

while (!valid) ;

if (strlen(mname) == 0)

strcpy(mname,membername(mcode)) ;

do

{

valid = 1 ;

gotoxy(5,25) ; clreol() ;

cout <<"Enter the Phone no. of Member or <ENTER> for no change" ;

gotoxy(19,14) ; clreol() ;

gets(mphone) ;

if (mphone[0] == '0')

return ;

if ((strlen(mphone) < 7 && strlen(mphone) > 0) || (strlen(mphone) > 9))

{

valid = 0 ;

gotoxy(5,25) ; clreol() ;

cout <<"\7Enter correctly" ;

getch() ;

}

} while (!valid) ;

if (strlen(mphone) == 0)

strcpy(mphone,memberphone(mcode)) ;

do

{

valid = 1 ;

gotoxy(5,25) ; clreol() ;

cout <<"Enter the address of the member or <ENTER> for no change" ;

gotoxy(19,15) ; clreol() ;

gets(maddress) ;

strupr(maddress);

if(maddress[0]='0')

return ;

if (strlen(maddress) > 32)

{

valid = 0 ;

gotoxy(5,25) ; clreol() ;

cout <<"\7Enter correctly (Range: 1..32)" ;

getch() ;

}

} while (!valid) ;

if (strlen(maddress) == 0)

strcpy(maddress,memberaddress(mcode)) ;

gotoxy(5,25) ; clreol() ;

do

{

gotoxy(5,18) ; clreol() ;

cout <<"Do you want to save changes (y/n) : " ;

ch = getche() ;

ch = toupper(ch) ;

if (ch == '0')

return ;

} while (ch != 'Y' && ch != 'N') ;

if (ch == 'N')

return ;

MEMBER::modify(mcode,mname,mphone,maddress) ;

gotoxy(5,23) ;

cout <<"\7Record Modified" ;

getch() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION GIVES BOOK CODE TO DELETE THE BOOK RECORD

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void WORKING :: delete\_book(void)

{

BOOK B ;

char t1code[5], tname[33], tauthor[26], ch ;

int t2code=0, tcode=0 ;

int valid ;

do

{

valid = 1 ;

while (1)

{

clrscr() ;

gotoxy(72,1) ;

cout <<"<0>=Exit" ;

gotoxy(5,5) ;

cout <<"Enter Code or Name of the Book to be Deleted" ;

gotoxy(5,6) ;

cout <<" or " ;

gotoxy(5,7) ;

cout <<"Press <ENTER> for help " ;

gets(t1code) ;

if (t1code[0] == '0')

return ;

if (strlen(t1code) == 0)

B.list() ;

else

break ;

}

t2code = atoi(t1code) ;

tcode = t2code ;

if ((tcode == 0 && !bookname\_found(t1code)) || (tcode != 0 && !book\_found(tcode)))

{

valid = 0 ;

gotoxy(5,10) ;

cout <<"\7Record not found" ;

gotoxy(5,11) ;

cout <<"Press <ESC> to exit or any other key to continue..." ;

ch = getch() ;

if (ch == 27)

return ;

}

} while (!valid) ;

if (tcode == 0)

tcode = bookcodeof(t1code) ;

clrscr() ;

gotoxy(72,1) ;

cout <<"<0>=Exit" ;

BOOK::display(tcode) ;

do

{

gotoxy(5,13) ; clreol() ;

cout <<"Do you want to delete this record (y/n) : " ;

ch = getche() ;

ch = toupper(ch) ;

if (ch == '0')

return ;

} while (ch != 'Y' && ch != 'N') ;

if (ch == 'N')

return ;

int tavail, tcopies ;

tavail = available(tcode) ;

tcopies = no\_of\_copies(tcode) ;

if (tavail != tcopies)

{

gotoxy(5,15) ;

cout <<"\7Record cannot be deleted. This book is issued." ;

getch() ;

return ;

}

BOOK::delete\_rec(tcode) ;

gotoxy(5,23) ;

cout <<"\7Record Deleted" ;

getch() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// THIS FUNCTION GIVES MEMBER CODE TO DELETE THE MEMBER

// RECORD

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void WORKING :: delete\_member(void)

{

MEMBER M ;

char m1code[5], mname[26], mphone[10], maddress[33], ch ;

int m2code=0, mcode=0 ;

int valid ;

do

{

valid = 1 ;

while (1)

{

clrscr() ;

gotoxy(72,1) ;

cout <<"<0>=Exit" ;

gotoxy(5,7) ;

cout <<"Enter Code no. of the Member to be Deleted" ;

gotoxy(5,8) ;

cout <<" or " ;

gotoxy(5,9) ;

cout <<"Press <ENTER> for help " ;

gets(m1code) ;

m2code = atoi(m1code) ;

mcode = m2code ;

if (m1code[0] == '0')

return ;

if (strlen(m1code) == 0)

M.list() ;

else

break ;

}

if (mcode == 0)

{

valid = 0 ;

gotoxy(5,25) ;

cout <<"\7Enter Correctly" ;

getch() ;

}

if (valid && !member\_found(mcode))

{

valid = 0 ;

gotoxy(5,13) ;

cout <<"\7Record not found" ;

gotoxy(5,14) ;

cout <<"Press <ESC> to exit or any other key to continue..." ;

ch = getch() ;

if (ch == 27)

return ;

}

} while (!valid) ;

clrscr() ;

gotoxy(72,1) ;

cout <<"<0>=Exit" ;

MEMBER::display(mcode) ;

do

{

gotoxy(5,10) ; clreol() ;

cout <<"Do you want to Delete this record (y/n) : " ;

ch = getche() ;

ch = toupper(ch) ;

if (ch == '0')

return ;

} while (ch != 'Y' && ch != 'N') ;

if (ch == 'N')

return ;

if (issued(mcode))

{

gotoxy(5,15) ;

cout <<"\7Record cannot be delete. Member has a book" ;

getch() ;

return ;

}

MEMBER::delete\_rec(mcode) ;

gotoxy(5,23) ;

cout <<"\7Record Modified" ;

getch() ;

}

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// MAIN FUNCTION CALLING INTRODUCTION AND MAIN MENU

//\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

void main(void)

{

MENU menu ;

menu.introduction() ;

menu.main\_menu() ;

}