**CODE:-**

#include <stdio.h>

#include <string.h>

typedef struct

{

int date, mon, year;

} PublDate;

typedef struct

{

char title[20], author[20], subj[20];

int num;

PublDate Publ;

} Books;

void my\_insert(Books b[], int n)

{

printf("Enter title, author, subject, number of copies and publishing date in DD MM YYYY format of book %d.\n", n + 1);

scanf("%s%s%s%d%d%d%d", b[n].title, b[n].author, b[n].subj, &b[n].num, &b[n].Publ.date, &b[n].Publ.mon, &b[n].Publ.year);

}

void my\_display(Books b[], int n)

{

int i;

for (i = 0; i < n; i++)

{

printf("The details of book %d are:\n", i + 1);

printf("Title:%s\nAuthor:%s\nSubject:%s\nNumber of copies:%d\nPublishing Date:-%d/%d/%d\n", b[i].title, b[i].author, b[i].subj, b[i].num, b[i].Publ.date, b[i].Publ.mon, b[i].Publ.year);

}

}

void my\_search(Books b[], int n)

{

char strch[20], input[20];

int i;

printf("Do you want to search by title or author?\n");

scanf("%s", strch);

printf("Enter the input.\n");

scanf("%s", input);

switch (strch[0])

{

case 't':

for (i = 0; i < n; i++)

{

if (strcmp(input, b[i].title) == 0)

printf("BOOK FOUND:\nTitle:%s\nAuthor:%s\nSubject:%s\nNumber of copies:%d\n", b[i].title, b[i].author, b[i].subj, b[i].num);

else

printf("BOOK NOT FOUND IN RECORDS.\n");

}

break;

case 'a':

for (i = 0; i < n; i++)

{

if (strcmp(input, b[i].author) == 0)

printf("BOOK FOUND:\nTitle:%s\nAuthor:%s\nSubject:%s\nNumber of copies:%d\n", b[i].title, b[i].author, b[i].subj, b[i].num);

else

printf("BOOK NOT FOUND IN RECORDS.\n");

}

break;

default:

printf("Erroneous input.\n");

}

}

void my\_delete(Books b[], int n)

{

char input[20];

int i, j;

printf("Enter the title of the book to be deleted.\n");

scanf("%s", input);

for (i = 0; i < n; i++)

{

if (strcmp(input, b[i].title) == 0)

{

for (j = i; j < n - 1; j++)

b[j] = b[j + 1];

}

}

}

int main()

{

Books Lib[20];

int choice, i = 0;

do

{

printf("Enter 1 to insert a book record.\nEnter 2 to search for book record.\nEnter 3 for deleting a book record.\nEnter 4 to display all book records.\nEnter number greater or equal to 5 to exit.\n");

scanf("%d", &choice);

switch (choice)

{

case 1:

my\_insert(Lib, i++);

break;

case 2:

my\_search(Lib, i);

break;

case 3:

my\_delete(Lib, i);

i--;

break;

case 4:

my\_display(Lib, i);

break;

}

} while (!(choice >= 5));

return 0;

}

**OUTPUT:-**

Enter 1 to insert a book record.

Enter 2 to search for book record.

Enter 3 for deleting a book record.

Enter 4 to display all book records.

Enter number greater or equal to 5 to exit.

1

Enter title, author, subject, number of copies and publishing date in DD MM YYYY format of book 1.

Sea

Mahep

News

5

31 07 2003

Enter 1 to insert a book record.

Enter 2 to search for book record.

Enter 3 for deleting a book record.

Enter 4 to display all book records.

Enter number greater or equal to 5 to exit.

1

Enter title, author, subject, number of copies and publishing date in DD MM YYYY format of book 2.

Land

Mahep

News

10

31 07 2003

Enter 1 to insert a book record.

Enter 2 to search for book record.

Enter 3 for deleting a book record.

Enter 4 to display all book records.

Enter number greater or equal to 5 to exit.

1

Enter title, author, subject, number of copies and publishing date in DD MM YYYY format of book 3.

Mountain

Mahep

News

15

04 08 2005

Enter 1 to insert a book record.

Enter 2 to search for book record.

Enter 3 for deleting a book record.

Enter 4 to display all book records.

Enter number greater or equal to 5 to exit.

4

The details of book 1 are:

Title:Sea

Author:Mahep

Subject:News

Number of copies:5

Publishing Date:-31/7/2003

The details of book 2 are:

Title:Land

Author:Mahep

Subject:News

Number of copies:10

Publishing Date:-31/7/2003

The details of book 3 are:

Title:Mountain

Author:Mahep

Subject:News

Number of copies:15

Publishing Date:-4/8/2005

Enter 1 to insert a book record.

Enter 2 to search for book record.

Enter 3 for deleting a book record.

Enter 4 to display all book records.

Enter number greater or equal to 5 to exit.

3

Enter the title of the book to be deleted.

Mountain

Enter 1 to insert a book record.

Enter 2 to search for book record.

Enter 3 for deleting a book record.

Enter 4 to display all book records.

Enter number greater or equal to 5 to exit.

4

The details of book 1 are:

Title:Sea

Author:Mahep

Subject:News

Number of copies:5

Publishing Date:-31/7/2003

The details of book 2 are:

Title:Land

Author:Mahep

Subject:News

Number of copies:10

Publishing Date:-31/7/2003

Enter 1 to insert a book record.

Enter 2 to search for book record.

Enter 3 for deleting a book record.

Enter 4 to display all book records.

Enter number greater or equal to 5 to exit.

2

Do you want to search by title or author?

title

Enter the input.

Land

BOOK NOT FOUND IN RECORDS.

BOOK FOUND:

Title:Land

Author:Mahep

Subject:News

Number of copies:10

Enter 1 to insert a book record.

Enter 2 to search for book record.

Enter 3 for deleting a book record.

Enter 4 to display all book records.

Enter number greater or equal to 5 to exit.

2

Do you want to search by title or author?

author

Enter the input.

Mahep

BOOK FOUND:

Title:Sea

Author:Mahep

Subject:News

Number of copies:5

BOOK FOUND:

Title:Land

Author:Mahep

Subject:News

Number of copies:10

Enter 1 to insert a book record.

Enter 2 to search for book record.

Enter 3 for deleting a book record.

Enter 4 to display all book records.

Enter number greater or equal to 5 to exit.

2

Do you want to search by title or author?

title

Enter the input.

A

BOOK NOT FOUND IN RECORDS.

Enter 1 to insert a book record.

Enter 2 to search for book record.

Enter 3 for deleting a book record.

Enter 4 to display all book records.

Enter number greater or equal to 5 to exit.

5