

SRM INSTITUTE OF SCIENCE
AND TECHNOLOGY,
KATTANKULATHUR

P.P.S. MINI PROJECT REPORT

TOPIC - BOOKS MANAGEMENT SYSTEM
IN THE LIBRARY

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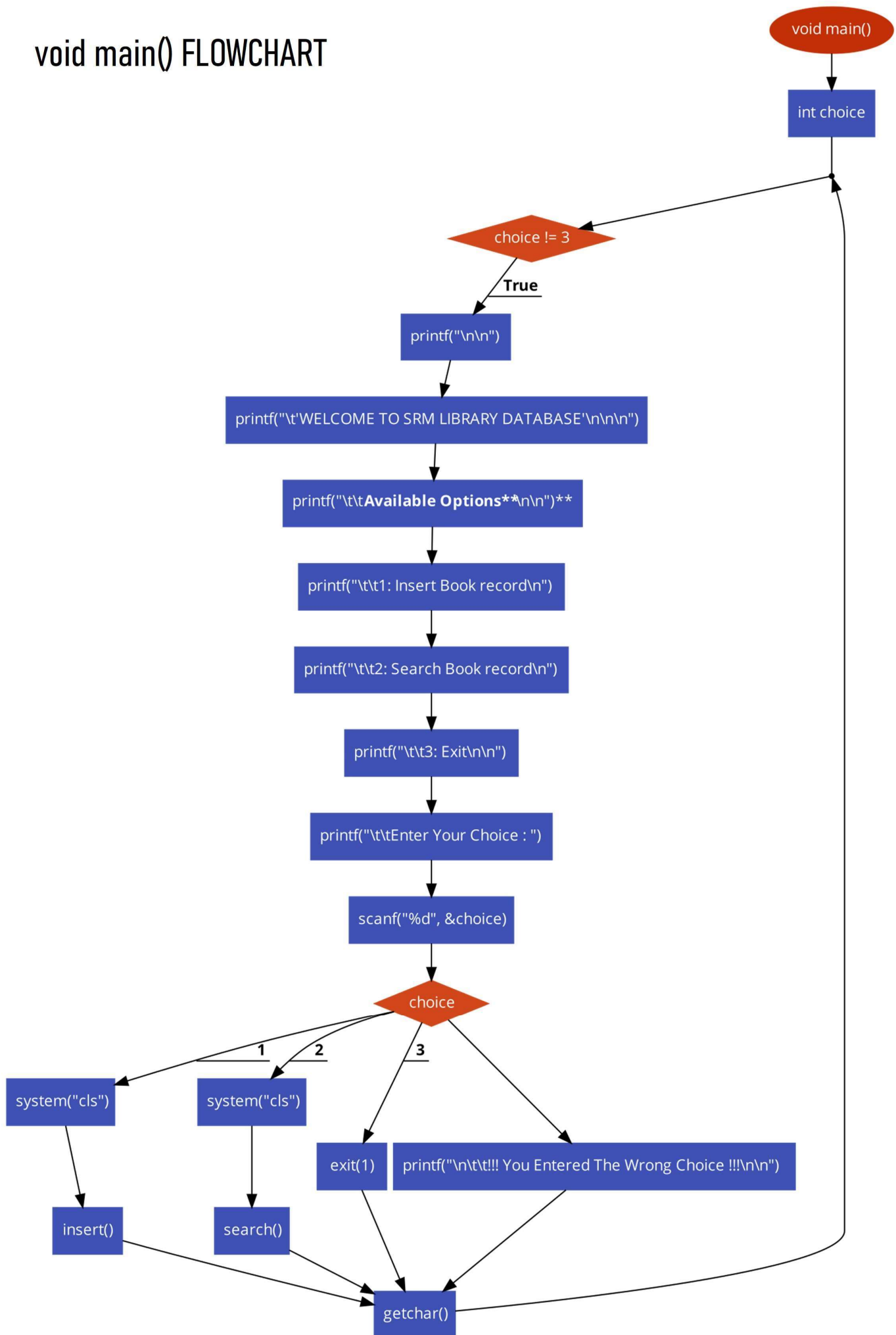
SECTION - Q1

MINI PROJECT

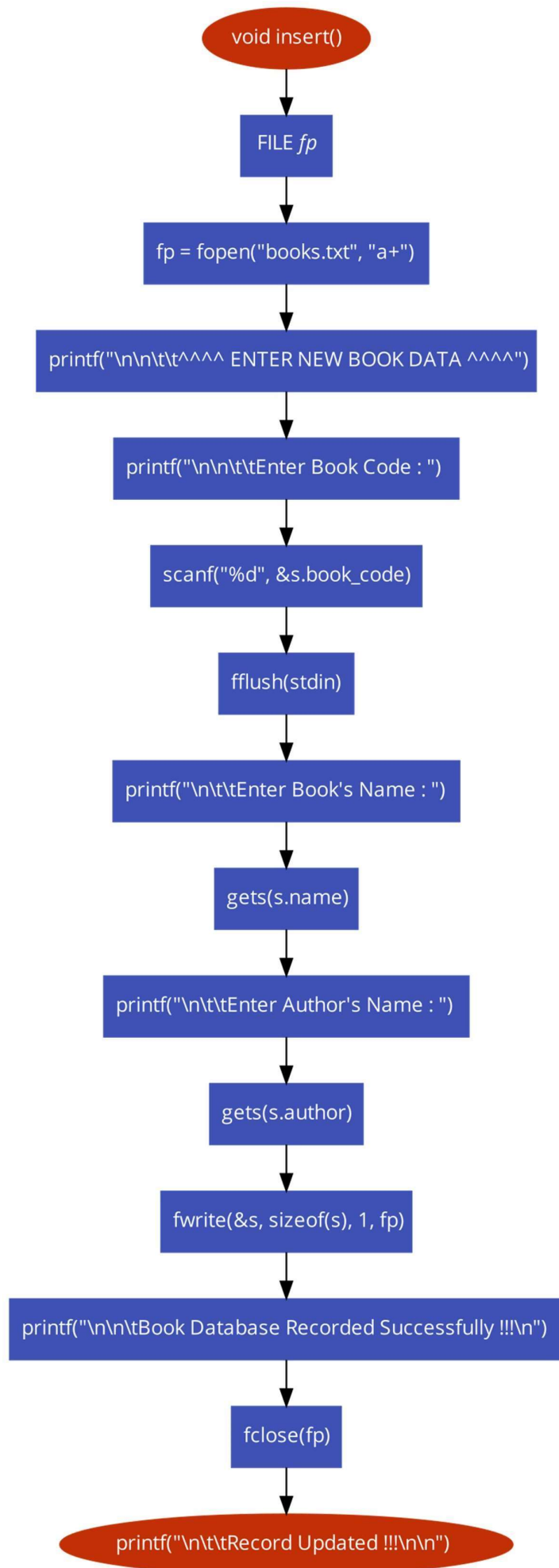
BOOKS MANAGEMENT SYSTEM IN THE LIBRARY

- Main objective is to make a data management system using file input output.
- Using this program we can insert, search book records.
- Record includes book code, name of the book, and the author of the book.
- Usage of data structure is done to store characters and numbers together.
- Files are used to permanently store the data.
- We can search for the saved records using fseek function.
- A flag variable is also used to get a true/false condition.
- Exit option is also made to quit the program.

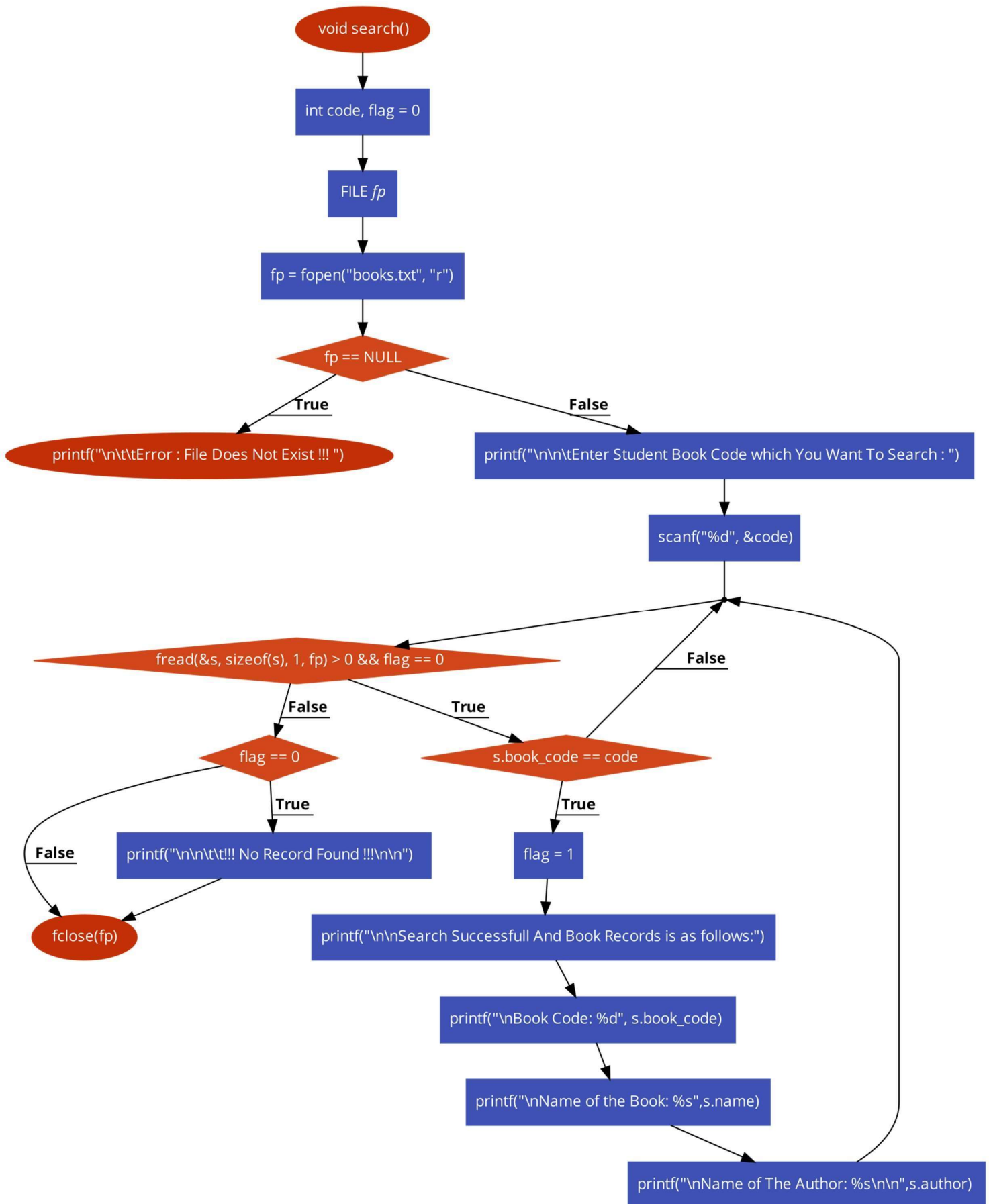
void main() FLOWCHART



void insert() FLOWCHART



Void search() FLOWCHART



INPUT:

```
#include <stdio.h>
#include <stdlib.h>
#include <conio.h>
void insert(); void
search();
struct book { int book_code;
char name[50]; char
author[50];
}; struct book s; void main() { int
choice; while (choice != 3)
{
    printf("\n\n");
    printf("\tWELCOME TO SRM LIBRARY
DATABASE\n\n\n");

    printf("\t\t****Available Options****\n\n");    printf("\t\t1: Insert Book
record\n");    printf("\t\t2: Search Book record\n");    printf("\t\t3: Exit\n\n");
    printf("\t\tEnter Your Choice : ");    scanf("%d", &choice);    switch (choice)
    {        case 1:
        system("cls");        insert();
    break;        case 2:        system("cls");
    search();        break;        case 3:
        exit(1);        break;
    default:
        printf("\n\t!!! You Entered The Wrong Choice
!!!\n\n");    }
    getchar();
}
}
void insert()
{
    FILE *fp;
    fp = fopen("books.txt", "a+");
    printf("\n\n\t\t^^^^ ENTER NEW BOOK DATA ^^^^");    printf("\n\n\t\tEnter
Book Code : ");    scanf("%d", &s.book_code);    fflush(stdin);
    printf("\n\n\t\tEnter Book's Name : ");    gets(s.name);
    printf("\n\n\t\tEnter Author's Name : ");    gets(s.author);
    fwrite(&s, sizeof(s), 1, fp);
    {
        printf("\n\n\tBook Database Recorded Successfully
!!!\n\n");    }
    fclose(fp);
    printf("\n\n\tRecord Updated !!!\n\n");

}
void search()
{
```

```

int code, flag = 0;  FILE *fp;
fp = fopen("books.txt", "r");  if (fp == NULL)

{
    printf("\n\t\tError : File Does Not Exist !!! ");    return;  }
printf("\n\n\tEnter Student Book Code which You Want To Search : ");
scanf("%d", &code);
while (fread(&s, sizeof(s), 1, fp) > 0 && flag == 0)
{
    if (s.book_code == code)
    {
        flag = 1;
        printf("\n\nSearch Successfull And Book Records is as follows:");
        printf("\nBook Code: %d", s.book_code);        printf("\nName of the Book:
%s", s.name);        printf("\nName of The Author:
%s\n\n", s.author);
    }
}
if (flag == 0)
{
    printf("\n\n\t\t!!! No Record Found !!!\n\n");
}
fclose(fp); }

```

OUTPUT:

```
'WELCOME TO SRM LIBRARY DATABASE'
```

```
****Available Options****
```

```
1: Insert Book record  
2: Search Book record  
3: Exit
```

```
Enter Your Choice : 1
```

```
^^^^ ENTER NEW BOOK DATA ^^^^^
```

```
Enter Book Code : 12456
```

```
Enter Book's Name : Harry Potter
```

```
Enter Author's Name : J.K. Rowling
```

```
Book Database Recorded Successfully !!!
```

```
Record Updated !!!
```

```
'WELCOME TO SRM LIBRARY DATABASE'
```

```
****Available Options****
```

```
1: Insert Book record  
2: Search Book record  
3: Exit
```

```
Enter Your Choice : 2
```


Enter Student Book Code which You Want To Search : 12456

Search Successfull And Book Records is as follows:

Book Code: 12456

Name of the Book: Harry Potter

Name of The Author: J.K. Rowling

'WELCOME TO SRM LIBRARY DATABASE'

****Available Options****

1: Insert Book record

2: Search Book record

3: Exit

Enter Your Choice : 3