

BOOKSHOP MANAGEMENT SYSTEM



BOOKSHOP MANAGEMENT

A PROJECT REPORT

SUBMITTED BY
RITHIKA KATHIRVEL
CLASS XII

GUIDED BY
MINI KALLATHU CHIRAYIL ABRAHAM
OUR OWN ENGLISH HIGH SCHOOL

2019-2020



Our Own English High School, Sharjah

Certificate

This is to certify that _____
of class _____ Registration No. _____
has satisfactorily completed the project work in Computer
Science during the academic year 2019-20 as prescribed
by C. B. S. E, New Delhi, India.

Date of Examination: _____

Signature of
Teacher -in -charge

Signature of
External Examiner

ACKNOWLEDGEMENT

I would like to sincerely and profusely thank my Computer teacher Ms.Mini kallathu, for her valuable guidance and support for completing my computer project on **BOOKSHOP MANAGEMENT SYSTEM**. I would like to extend my gratitude to CBSE and the principle of my school, Ms. Asma Gilani for providing me with all facilities that was required. This allowed me to explore new ideas and programming logics. Last but not the least, I would like to thank all the teaching and non-teaching faculties for their immense support in completing this project successfully.

- Rithika kathirvel

ABSTRACT

Bookshop management system should help the customers and the bookshop staffs. The user can decide to continue as bookshop staff or customers. The bookshop staffs have a username and password for their login and access to functions: add book, show book, modify book, check availability and delete book. The customers have access only to view all books.

The program is effective in managing a bookshop. The program helps in reducing the effort and time taken in bookkeeping the bookshop's book data. Book data can be added, modified, viewed and deleted in no time and almost zero effort.

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System Specification

a) Hardware Requirements:

- Processor: Pentium processor with Windows
- OS Memory: 512 MB
Disk Capacity: 1 GB

b) Software Requirements:

- Borland C++

PROJECT OVERVIEW:

In this '**Bookshop management system**' the user can decide to continue as bookshop staff or customers. The bookshop staffs have a username and password for their login and access to functions while the customers only have access to view all books.

Listed below are the main functions of this system:

- 1. Add Book Records:** This feature allows users to add a new book to bookshop management system application. Information such as name of the book, name of the author and number of copies should be provided, and the data is stored in file.
- 2. Show Book Records:** The add book records can be listed with this feature along with the author's name and number of copies of the book added.
- 3. Check Availability:** If you want to buy a particular book, this feature first checks its availability. Name, author and number of copies of the particular book is then displayed.
- 4. Modify Book Records:** You can modify the information of a book you can edit the book's name, author's name and the number of copies. All modified data are then stored in file.
- 5. Delete Book Records:** To delete book from the file of bookshop management, this feature is used. For this the book number should be provided.

The Header files used in this system are:

- 1. #include<fstream.h>**
- 2. #include<conio.h>**
- 3. #include<string.h>**
- 4. #include<iomanip.h>**
- 5. #include<iostream.h>**
- 6. #include<stdio.h>**
- 7. #include<stdlib.h>**

BOOKSHOP MANAGEMENT

CUSTOMER

ADMIN

PASSWORD

ADD BOOKS

**SHOW
BOOKS**

**CHECK
AVAILABILITY**

MODIFY BOOK

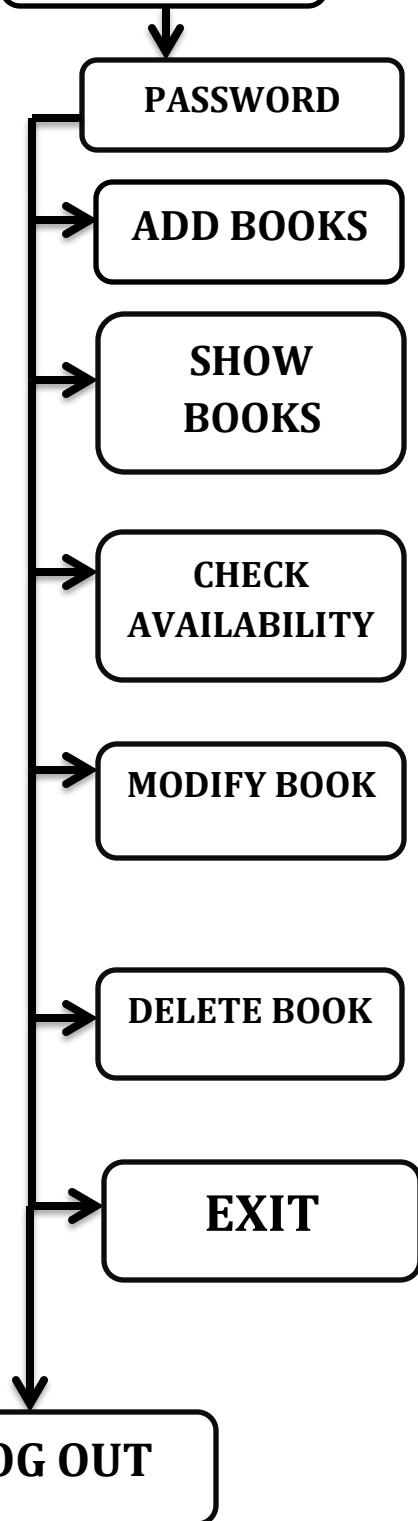
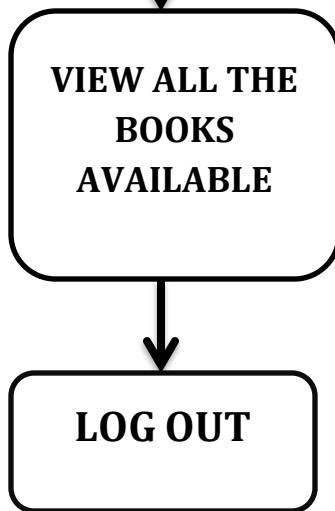
DELETE BOOK

EXIT

**VIEW ALL THE
BOOKS
AVAILABLE**

LOG OUT

LOG OUT



DATA FILE DESIGN

- 1. fp:** It is a file used for store the book data.
- 2. users:** It is a file used for store the username and password of the system administrators.
- 3. fp2:** It is a file used while deleting the book record from file ‘fp’.

- **SPECIMEN:**

1. Book details → “book.dat”

Serial number	Field number	Field description
1	char book_number[30]	Book code
2	char book_name[50]	Book name
3	char author_name[20]	Author's name
4	int num_copies	Number of copies of the book

2. Used for deletion → “Temp.dat”

CLASS DESCRIPTION

1. Class- User

Data attributes :

- Username
- password

Methods:

- get_username()
- returnpass()
- returnname()

2. Class- Book

Data attributes :

- book_number
- char book_name
- char author_name
- int num_copies

Methods:

- get_book_details()
- showbook()
- modifybook()
- getbooknumber()
- report()

FUNCTION DESCRIPTION

1. void write_book():

Function To Add Book Into File ‘fp’.

2. void display_a_book(char n[]):

Function To Check Availability on A Book and Display If Found.

3. void modify_book():

Function To Modify Book In File ‘fp’.

4. void delete_book():

Function To Delete Book From File ‘fp’.

5. void display_allbook():

Function to Show all the Book in File ‘fp’.

6. void admin():

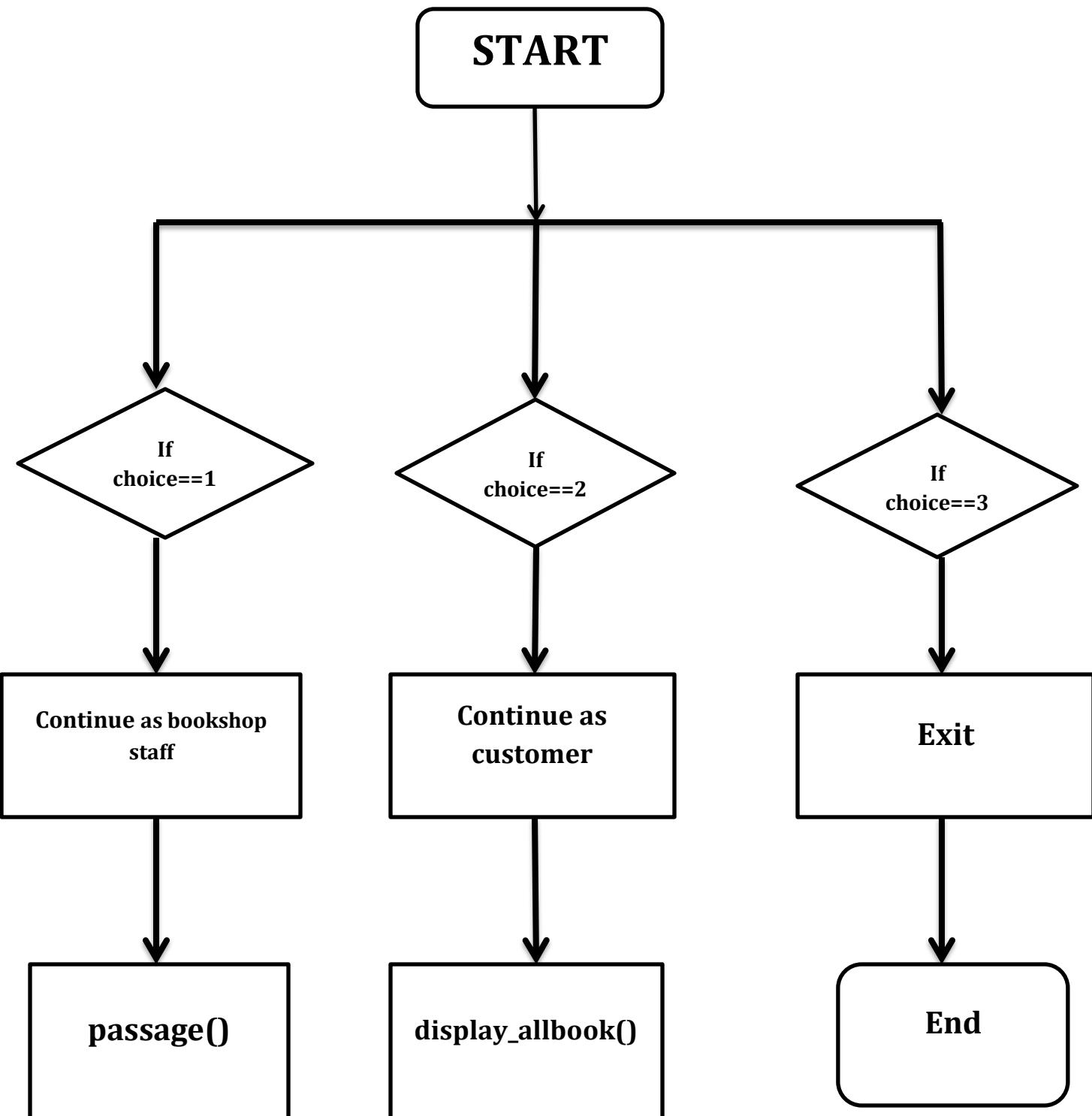
Function from Which the Admin Can Access the Above Functions.

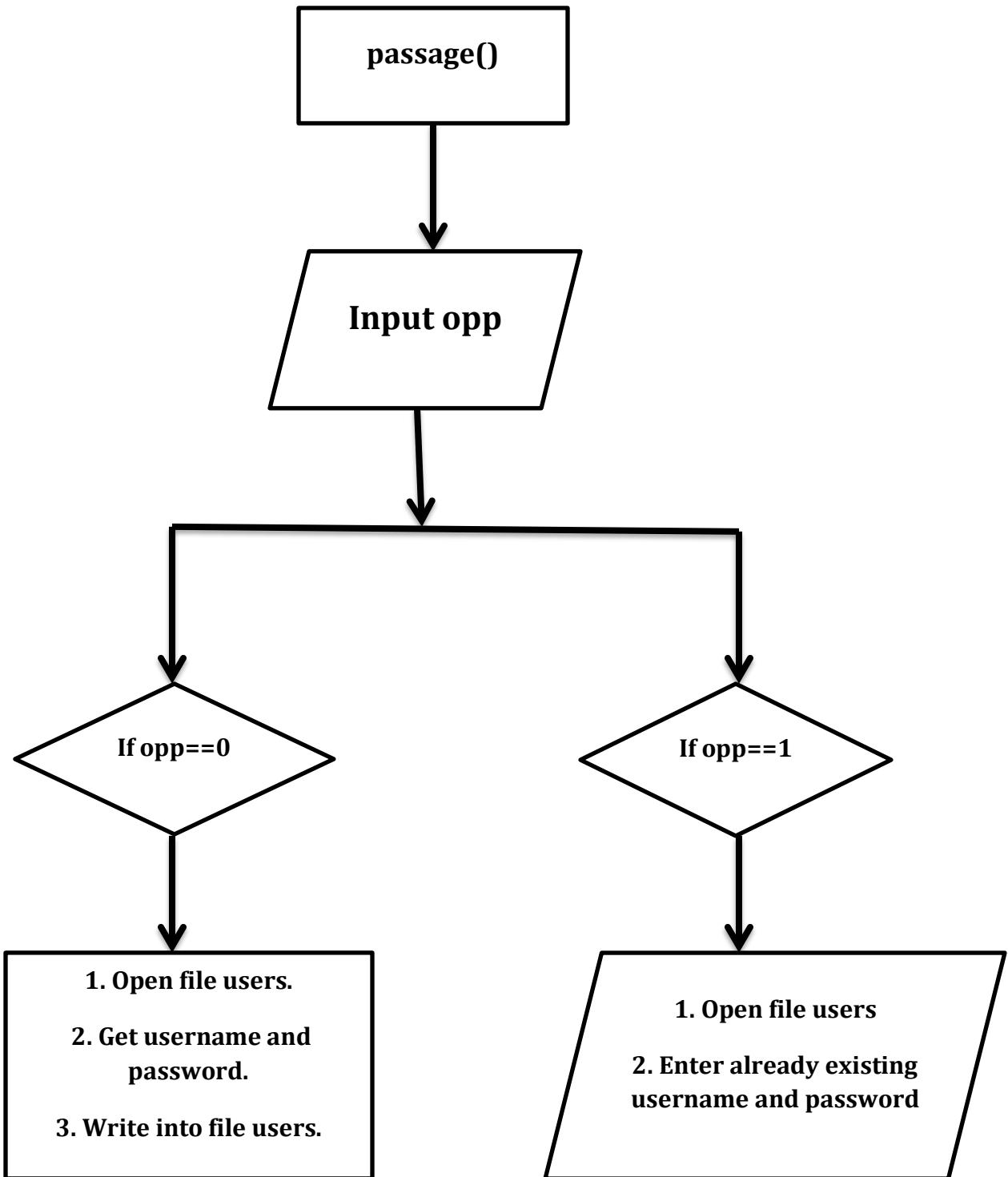
7. void passage():

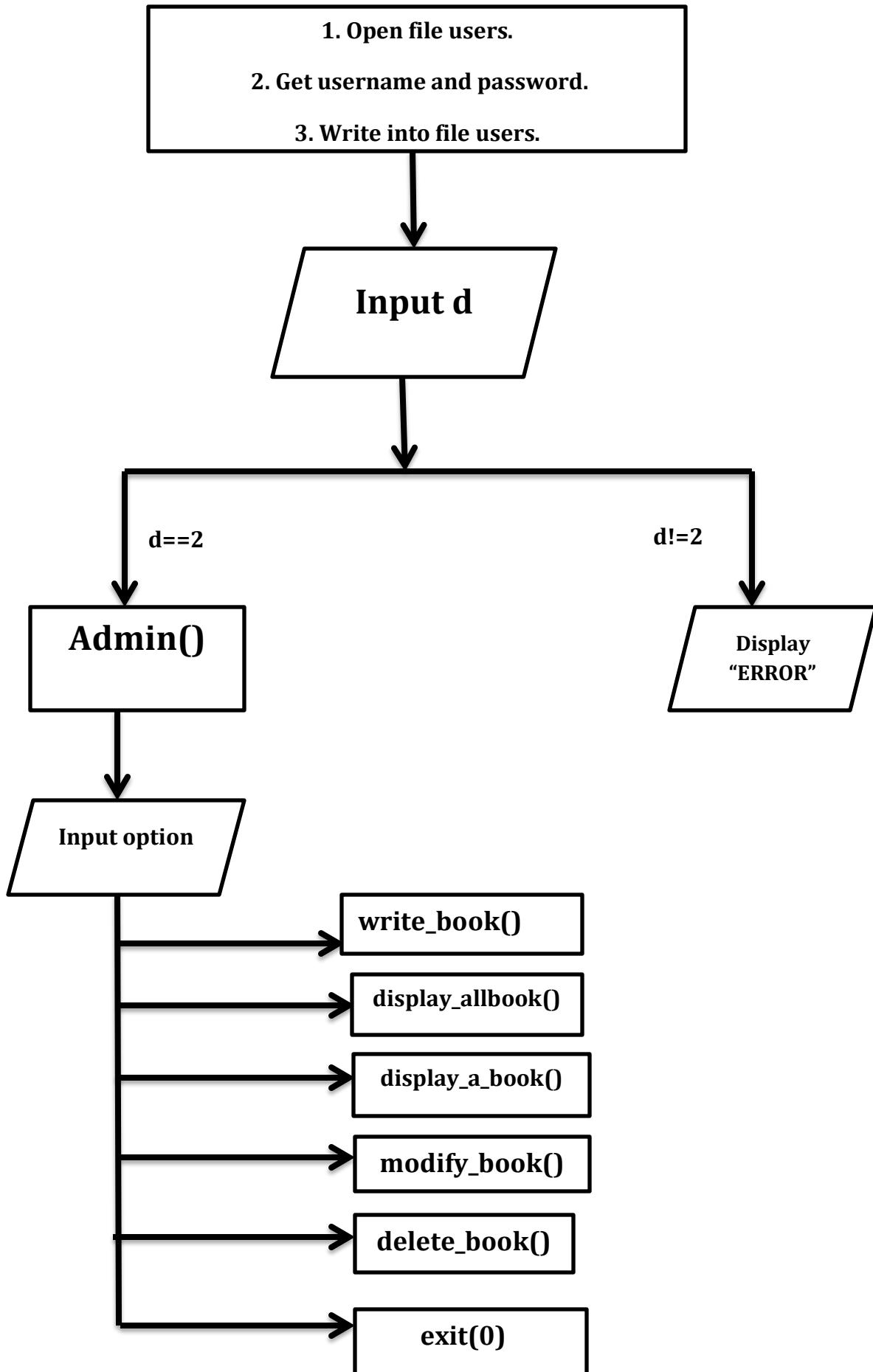
Function Which Allows Only Authorized Person To Access Function void admin().

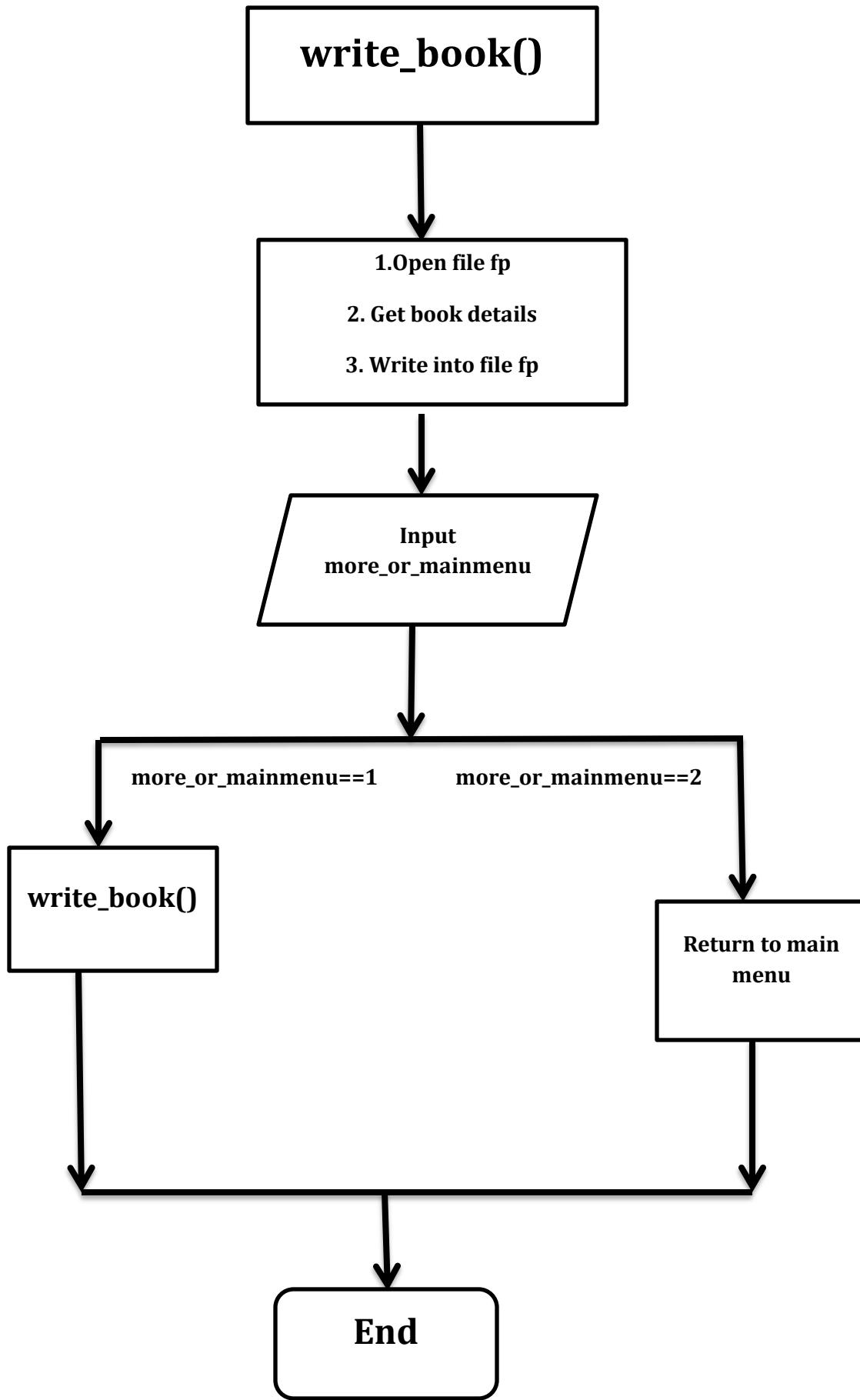
8. void main():

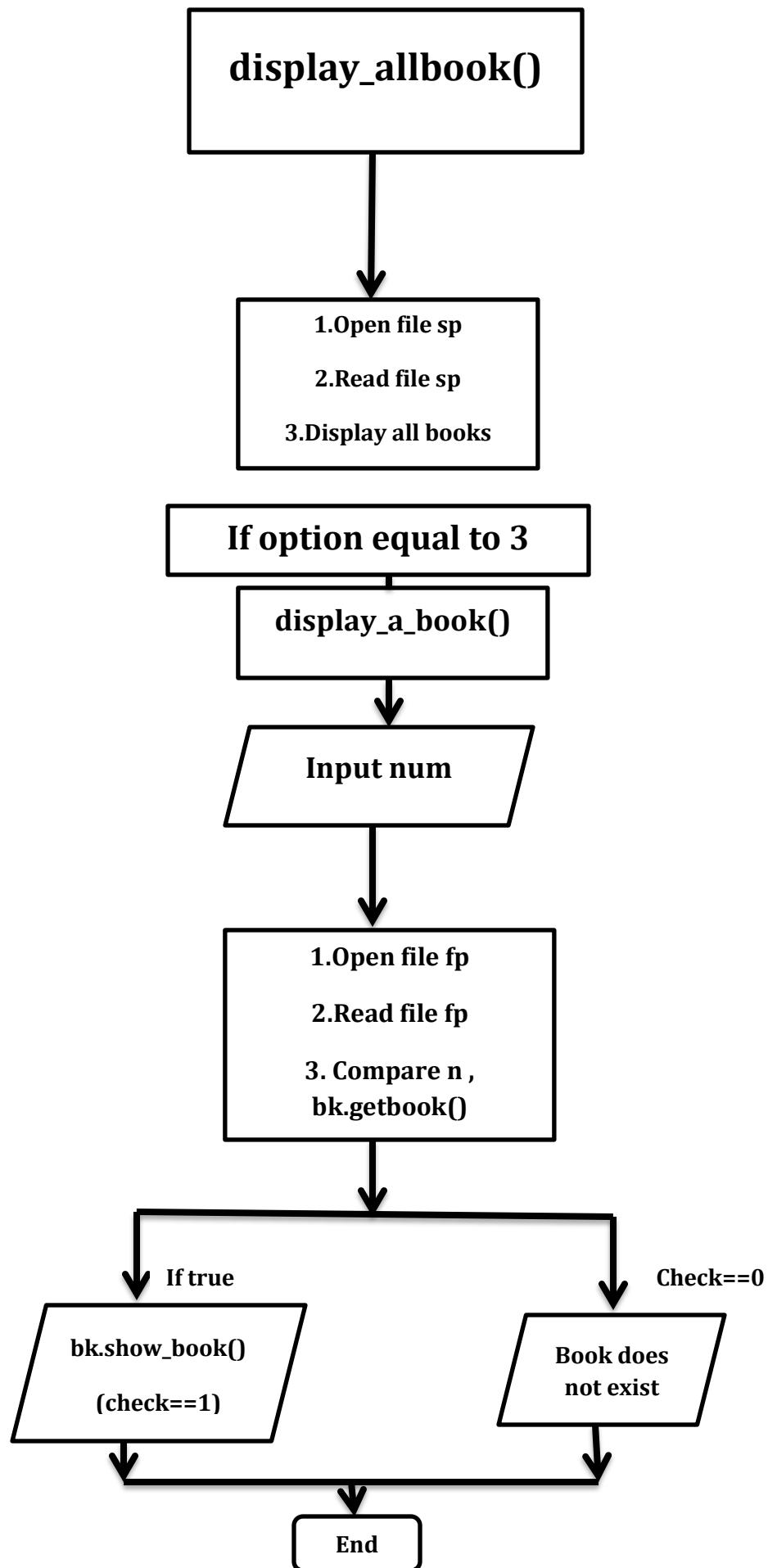
Function Which Acts as the Entry Function For the Program. This Function contains The Main Menu.

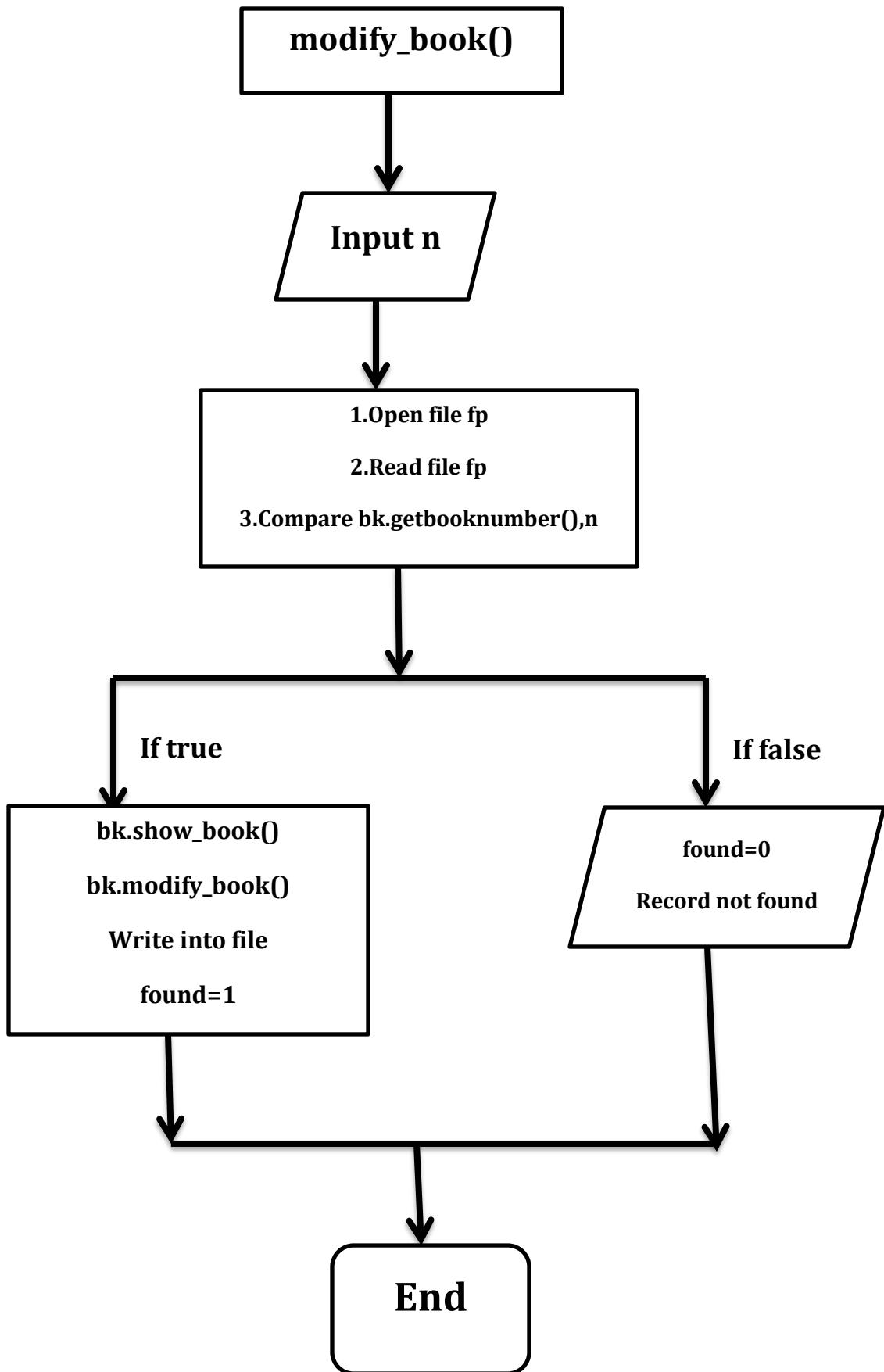


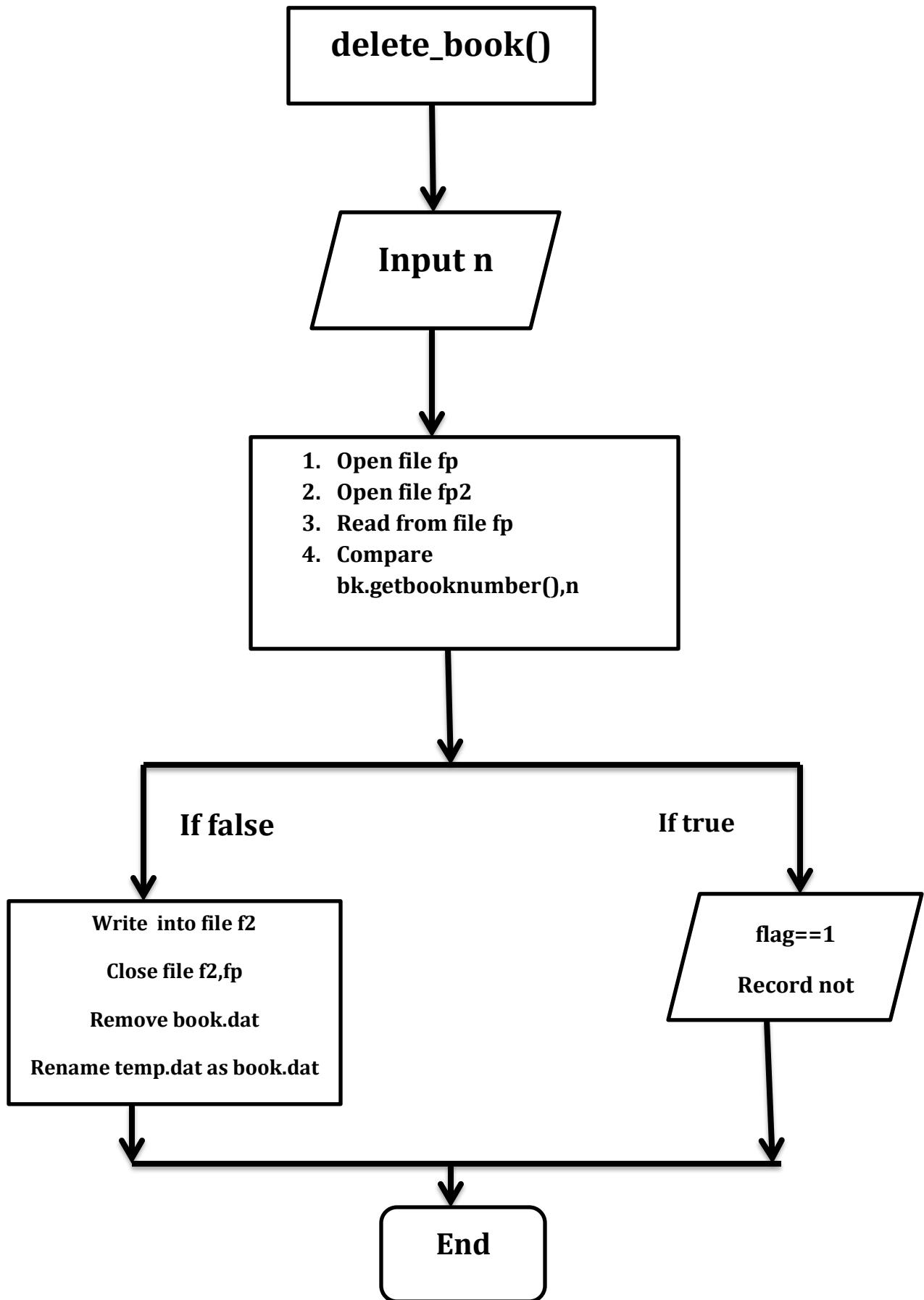


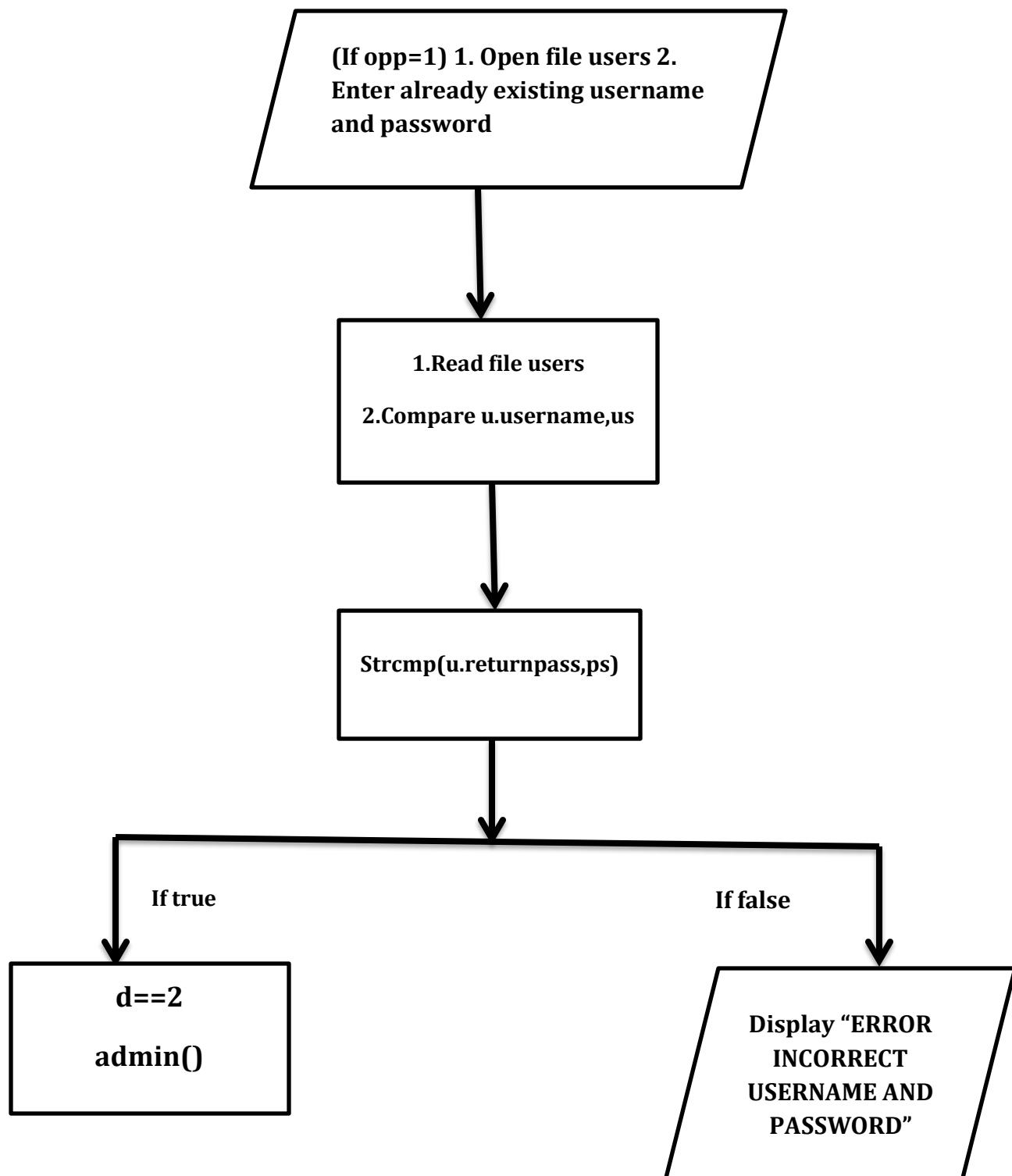


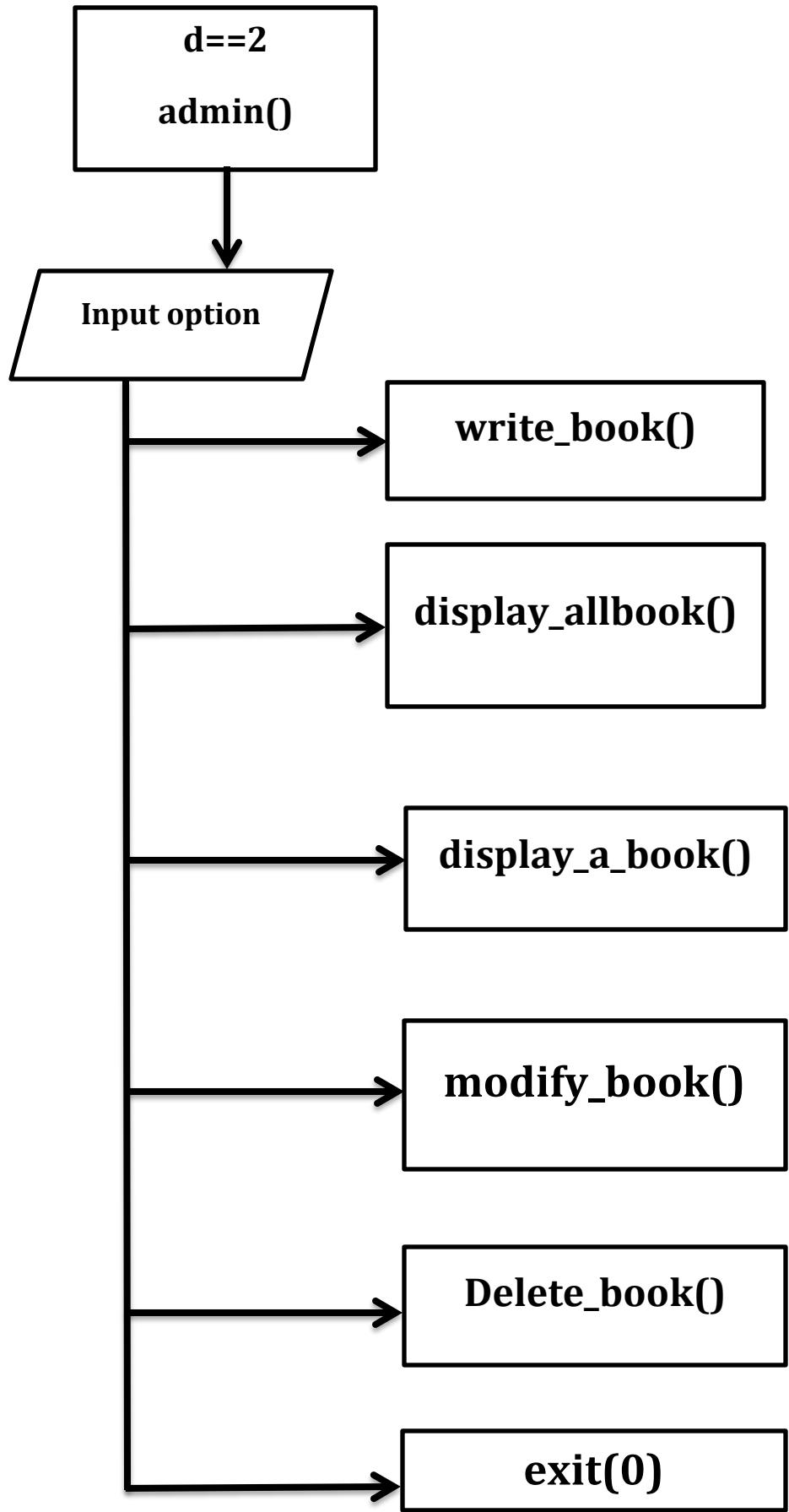


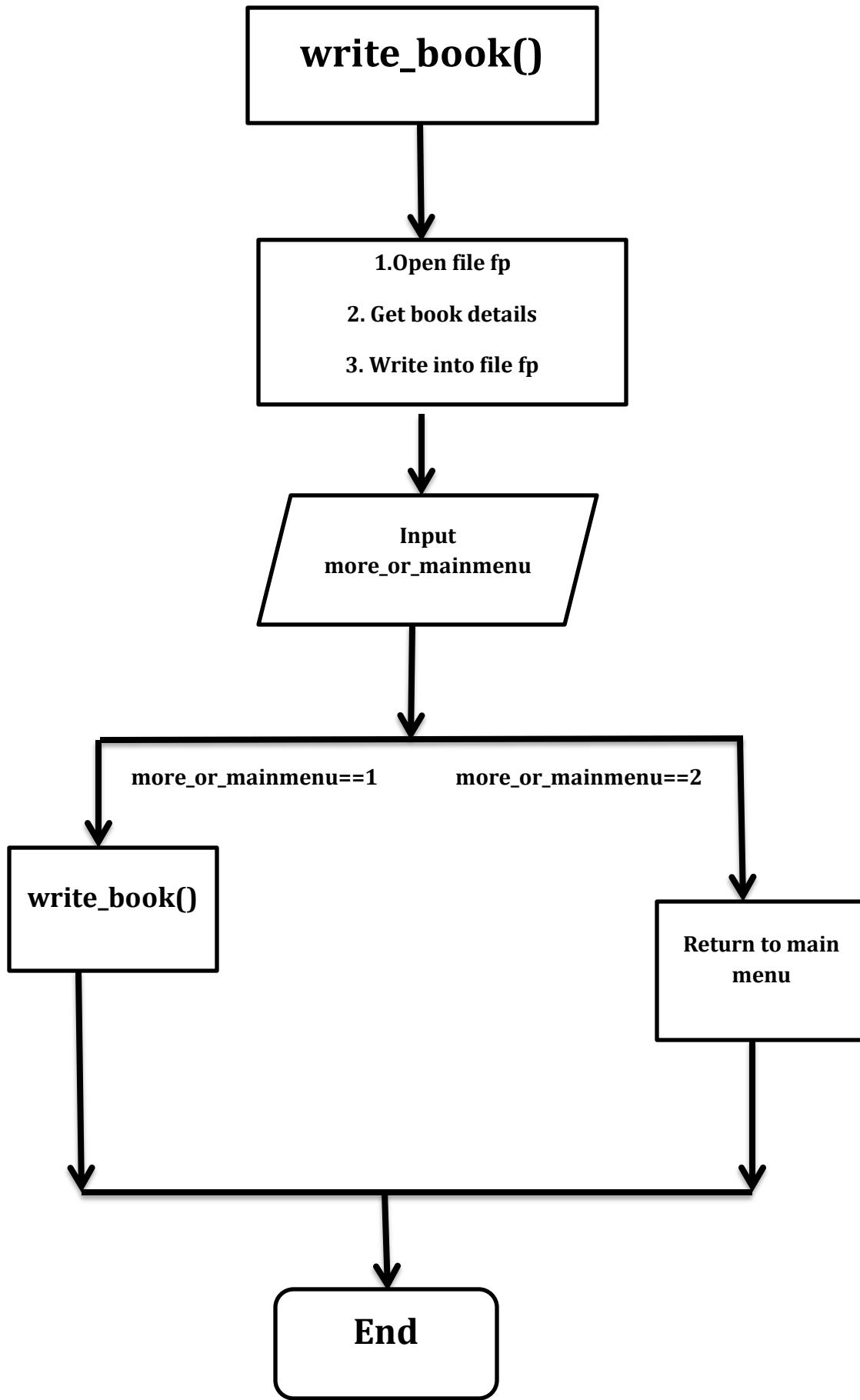


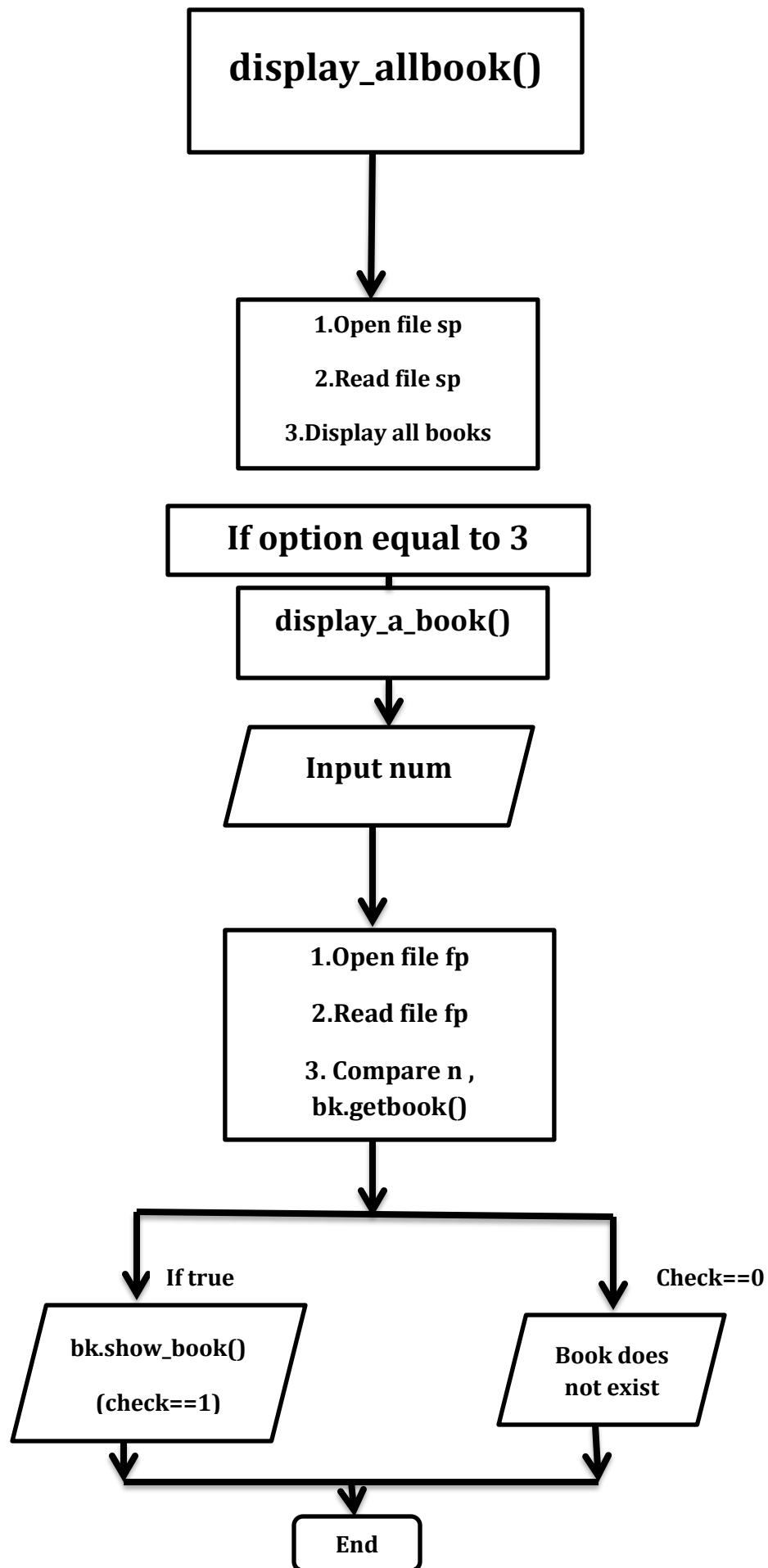


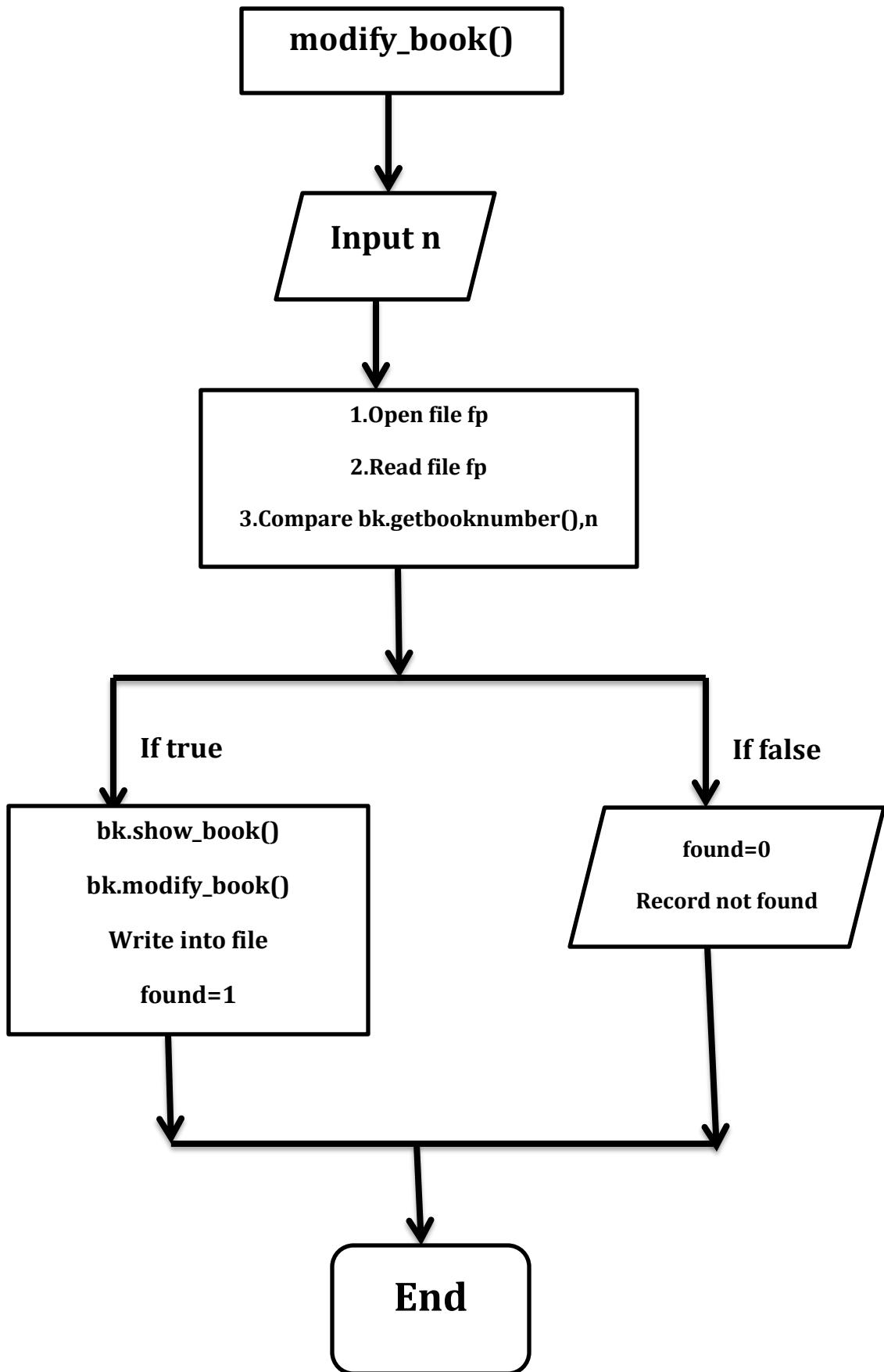


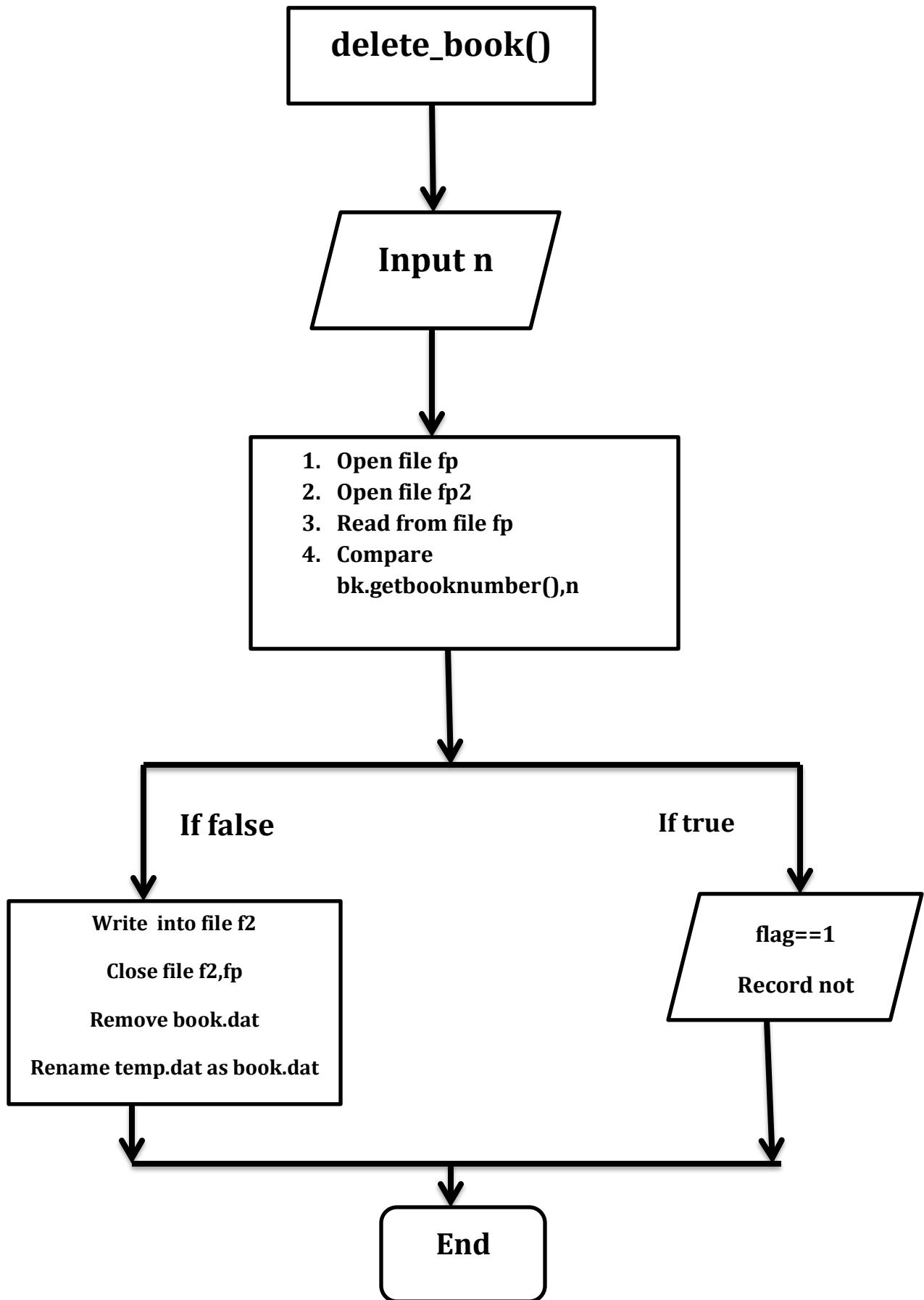












PROGRAM SOURCE CODE

```
#include<fstream.h>
#include<conio.h>
#include<string.h>
#include<iomanip.h>
#include<iostream.h>
#include<stdio.h>
#include<stdlib.h>

class user
{
char username[30];
char password[10];
public:
void get_username()
{cout<<"\nEnter username: ";
gets(username);
cout<<"\nEnter password: ";
gets(password);
}
char* returnpass()
{return password;}
char*returnname()
```

```
{return username;}\n};\nclass book\n{char book_number[30];\nchar book_name[50];\nchar author_name[20];\nint num_copies;\npublic:\nvoid get_book_details()\n{cout<<"\nEnter DETAILS ABOUT BOOK \n";\ncout<<"\nEnter The Book Number: ";\ngets(book_number);\ncout<<"\nEnter The Name of The Book: ";\ngets(book_name);\ncout<<"\nEnter The Author's Name: ";\ngets(author_name);\ncout<<"\nEnter No. Of Copies : ";\ncin>>num_copies;\n}\nvoid show_book()\n{cout<<"\nBook Number: ";\nputs(book_number);
```

```
cout<<"\nBook Name: ";
puts(book_name);
cout<<"\nAuthor's Name: ";
puts(author_name);
cout<<"\nCOPIES : "<<num_copies;
}

void modify_book()
{cout<<"\nBOOK NUMBER OF THE BOOK TO BE MODIFIED ";
cin>>book_number;
cout<<"\nModify Book Name : ";
gets(book_name);
cout<<"\nModify Author's Name: ";
gets(author_name);
cout<<"\nEnter No. Of Copies : ";
cin>>num_copies;

}

char* getbooknumber()
{
return book_number;
}

void report()
{
```

```
cout<<book_number<<setw(25)<<book_name<<setw(15)<<a  
uthor_name<<setw(25)<<num_copies<<endl;  
  
}  
  
}; //end of the class
```

```
fstream fp; //global declaration of file fp  
fstream users;  
book bk; //object which along to class book  
user u;  
void write_book()  
{  
cout<<"\n||||||||||||||||||||||||||||||||||||||||";  
cout<<"\nFUNCTION TO ADD BOOKS";  
cout<<"\n||||||||||||||||||||||||||||||||||||||||";  
||||||||||";  
  
int more_or_mainmenu;  
fp.open("book.dat",ios::out|ios::app|ios::binary);  
do  
{  
bk.get_book_details();
```

```
    fp.write((char*)&bk,sizeof(book));
    cout<<"\nPress 1 to add more books.";
    cout<<"\nPress 2 to return to main menu.\n";
    cout<<"Enter: ";
    cin>>more_or_mainmenu;
}while(more_or_mainmenu == 1);
fp.close();
}
```

```
void display_a_book(char n[])
{
    cout<<"\nBOOK DETAILS\n";
    int check=0;
    fp.open("book.dat",ios::in);
    while(fp.read((char*)&bk,sizeof(book)))
    {
        if(strcmpi(bk.getbooknumber(),n)==0)
        {
            bk.show_book();
            check=1;
        }
    }
}
```

```
fp.close();
if(check==0)
cout<<"\n\nBook does not exist";
getch();
}

void modify_book()
{
char n[20];
int found=0;
cout<<"\n\n\tMODIFY BOOK";
cout<<"\n\n\tEnter The book number: ";
cin>>n;
fp.open("book.dat",ios::in|ios::out|ios::binary);
while(fp.read((char*)&bk,sizeof(book)) && found==0)
{
if(strcmpi(bk.getbooknumber(),n)==0)
{
bk.show_book();
cout<<"\nEnter The New Details of
book"<<endl;
bk.modify_book();
```

```
        int pos=-1*sizeof(bk);
        fp.seekp(pos,ios::cur);
        fp.write((char*)&bk,sizeof(book));
        cout<<"\n\n\t Record Updated
Successfully...";

        found=1;
    }

}

fp.close();
if(found==0)
    cout<<"\n\n Record Not Found ";
getch();
}

void delete_book()
{
    char n[20];
    int flag=0;
    cout<<"\n\n\n\tDELETE BOOK";
    cout<<"\n\nEnter The Book's number You Want To
Delete: ";
    cin>>n;
```

```
fp.open("book.dat",ios::in|ios::out|ios::binary);
fstream fp2;
fp2.open("Temp.dat",ios::out);
fp.seekg(0,ios::beg);
while(fp.read((char*)&bk,sizeof(book)))
{
    if(strcmpi(bk.getbooknumber(),n)!=0)
    {
        fp2.write((char*)&bk,sizeof(book));
    }
    else
        flag=1;
}
fp2.close();
fp.close();
remove("book.dat");
rename("Temp.dat","book.dat");
if(flag==1)
    cout<<"\n\n\tRecord Deleted ..";
else
    cout<<"\n\nRecord not found";
getch();
}
```

```
void display_allbook()
{
    fp.open("book.dat",ios::in|ios::binary);
    if(!fp)
    {
        cout<<"ERROR!!! FILE NOT FOUND ";
        getch();
        return;
    }
    cout<<"\n\n\tBook LIST\n\n";
    cout<<"=====\n";
    cout<<"| Book Number |"<<setw(10)<<"| Book Name
|"<<setw(15)<<"| Author |"<<setw(30)<<"| Copies |"<<endl;
    cout<<"=====\n";
    while(fp.read((char*)&bk,sizeof(book)))
    {
        bk.report();
    }
    fp.close();
}
```



```
@@@@@@@nEnter your Option: ;  
  
cin>>option;  
switch(option)  
{  
    case 1:system("color B2");  
        write_book();  
        system("cls");  
        break;  
    case 2: system("color D0");  
        display_allbook();  
        system("cls");  
        break;  
    case 3: system("color A3");  
        char num[20];  
        system("cls");  
        cout<<"\n\n\tPlease Enter The book No. ";  
        cin>>num;  
        display_a_book(num);  
        break;  
    case 4: system("color F0");
```

```
        modify_book();
        system("cls");
        break;
    case 5: system("color E5");
        delete_book();
        system("cls");
        break;
    case 6: exit(0);
        break;
    default:cout<<"INVALID OPTION";
}
}
```

```
void passage()
{int d=0;
cout<<"\nNEW USER? ENTER 0";
cout<<"\nOLD USER? ENTER 1";
int opp;
cout<<"\nEnter YOUR OPTION: ";
```

```
cin>>opp;
if(opp==0)
{users.open("u.dat",ios::out|ios::in|ios::binary);
u.get_username();
users.write((char*)&u,sizeof(u));
cout<<"\n****MESSAGE: WELCOME NEW USER****";
cout<<"\nENTER 2 TO CONTINUE: ";
cin>>d;
if(d==2)
admin();
else
cout<<"****WARNING: ERROR";
}
if(opp==1)
{users.open("u.dat",ios::in|ios::out|ios::binary);
char us[30];
char ps[10];
cout<<"\nENTER USERNAME: ";
gets(us);
cout<<"\nENTER PASSWORD: ";
gets(ps);
while(users.read((char*)&u,sizeof(u)))
{
```

```
    if(strcmp(u.returnname(),us)==0)
    {if(strcmp(u.returnpass(),ps)==0)
     admin();
    }

}

if(d!=2)
{cout<<"***ERROR: INCORRECT USERNAME***";}
}

users.close();

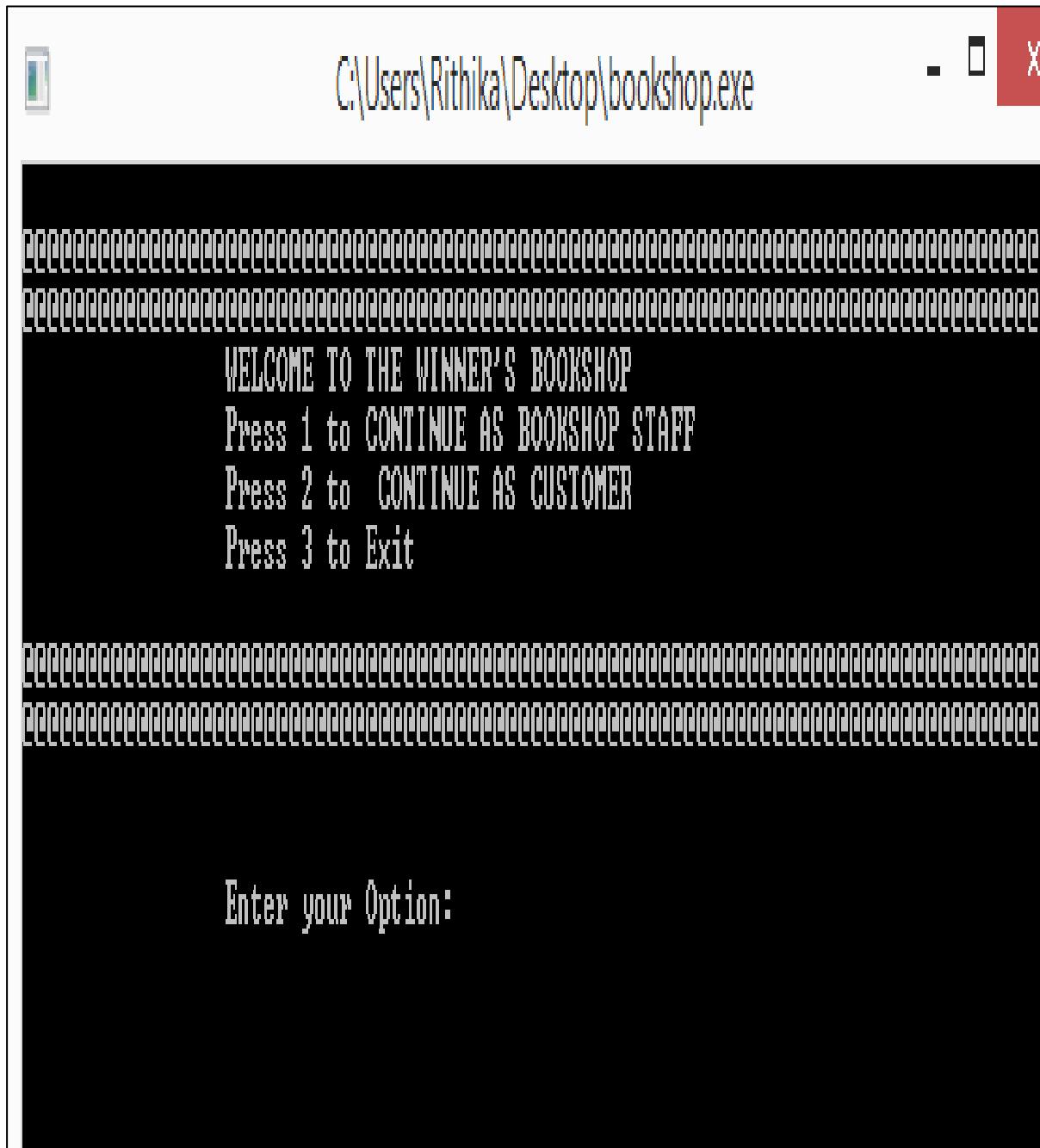
}

void main()
{for(;)
{int op;
 op=0;
 cout<<"\n@@@@@@@@"
```

```
@@@@@@@@";  
cout<<"\t\tWELCOME TO THE WINNER'S  
BOOKSHOP";  
cout<<"\n\t\tPress 1 to CONTINUE AS BOOKSHOP  
STAFF";  
cout<<"\n\t\tPress 2 to CONTINUE AS CUSTOMER";  
cout<<"\n\t\tPress 3 to Exit";  
cout<<"\n\n@@@@@@@@";  
@@@@@@@@";  
@@@@@@@@";  
@@@@@@@@";  
@@@@@@@@";  
@@@@@@@@";  
@@@@@@@@";  
@@@@@@@@";  
cout<<"\n\t\tEnter your Option: ";  
cin>>op;  
if(op==1)  
passage();  
if(op==2)  
{system("color E9");  
cout<<"\n+++++++";  
cout<<"\n+++++++";  
cout<<"\n\t\tWELCOME CUSTOMER TO WINNER'S  
BOOKSHOP";
```


OUTPUT

1. WELCOME SCREEN:



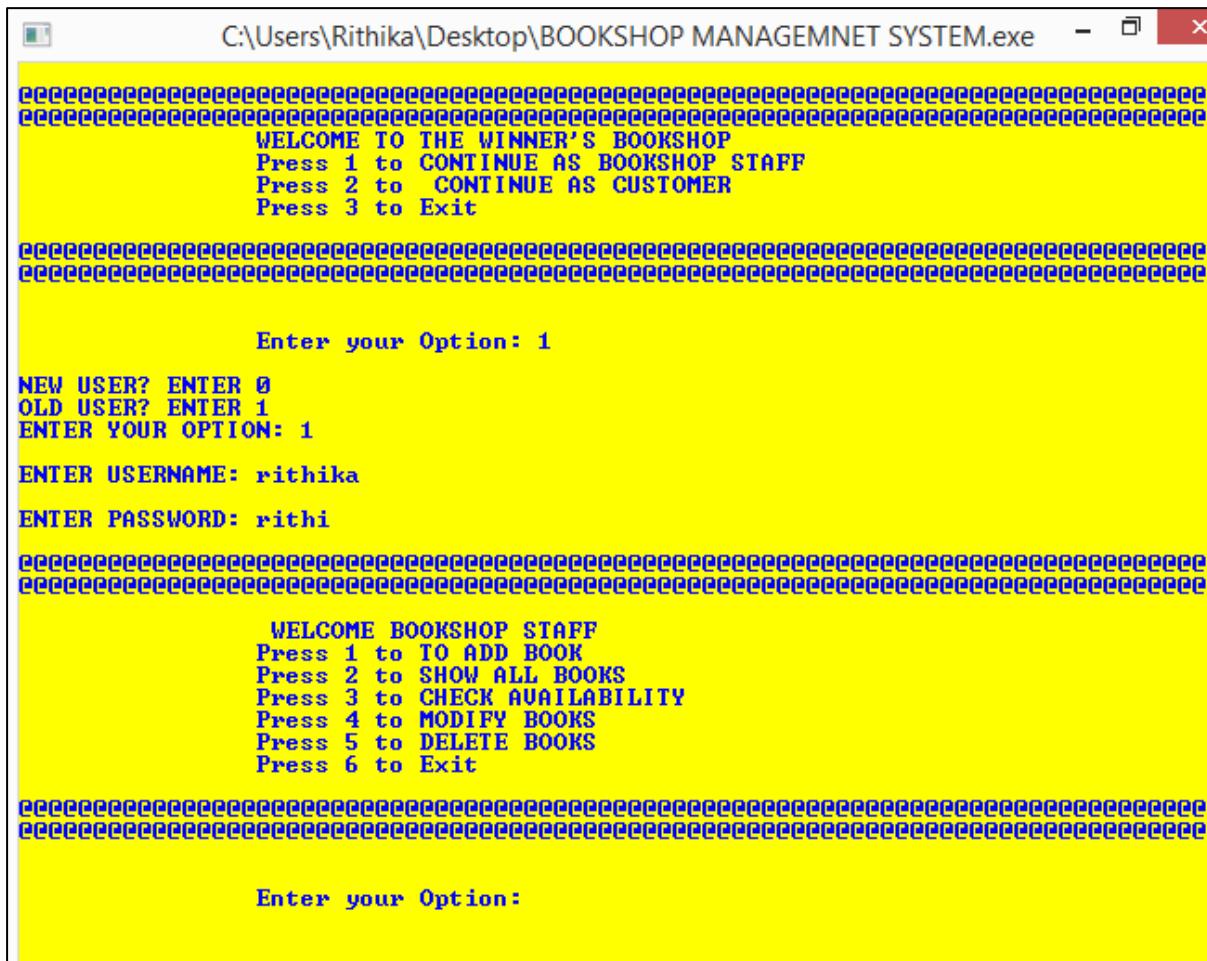
2. SIGN IN AS BOOKSHOP STAFF:

a. NEW USER

C:\Users\Rithika\Desktop\BOOKSHOP MANAGEMNET SYSTEM.exe

b. OLD USER:

i. **WHEN USERNAME AND PASSWORD IS CORRECT:**



ii. WHEN USERNAME AND PASSWORD IS INCORRECT:

2. FUNCTION TO ADD BOOK:

```
C:\Users\Rithika\Desktop\BOOKSHOP MANAGEMNET SYSTEM.exe - □ ×

WELCOME BOOKSHOP STAFF
Press 1 to TO ADD BOOK
Press 2 to SHOW ALL BOOKS
Press 3 to CHECK AVAILABILITY
Press 4 to MODIFY BOOKS
Press 5 to DELETE BOOKS
Press 6 to Exit

Enter your Option: 1

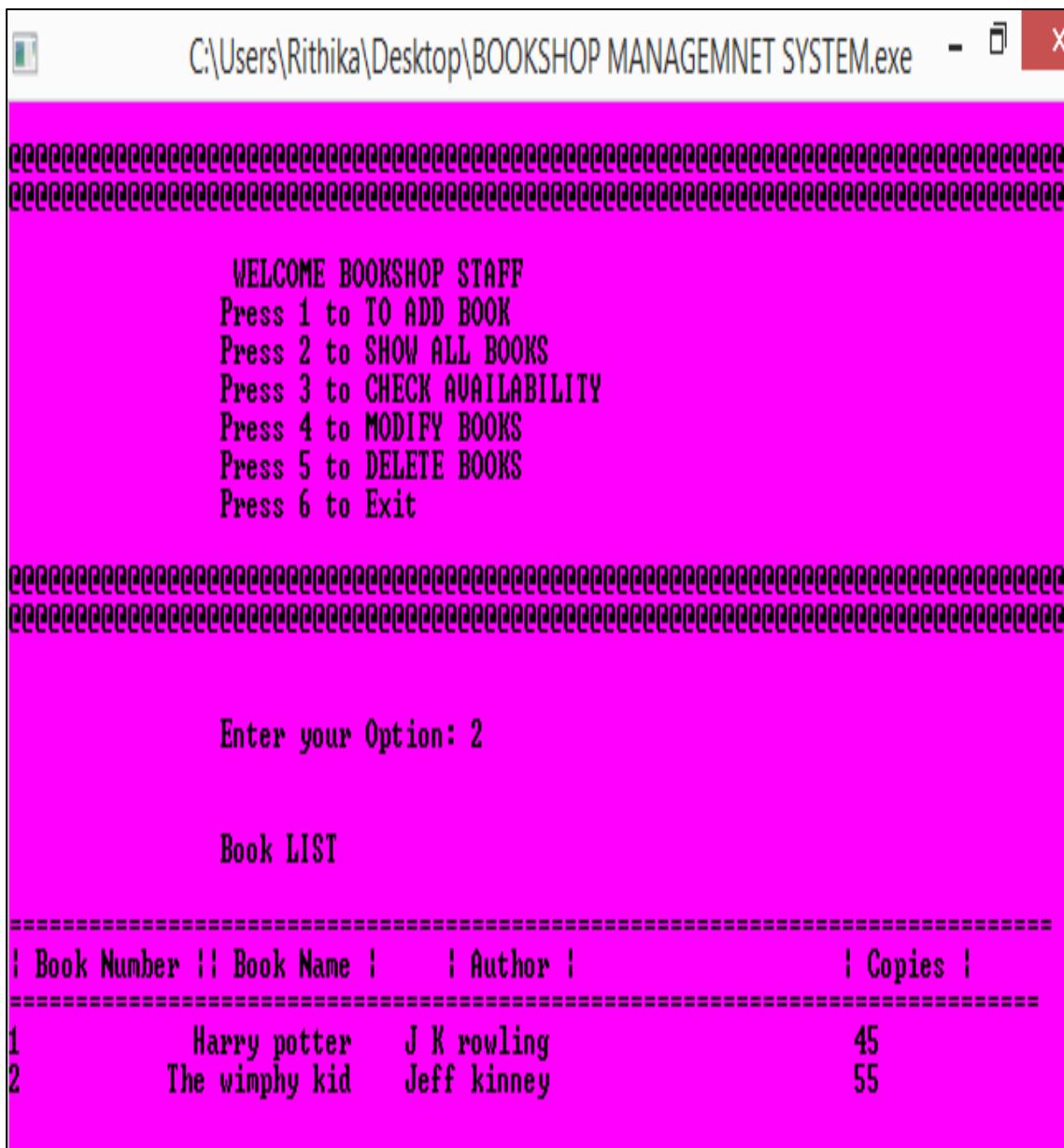
FUNCTION TO ADD BOOKS
ENTER DETAILS ABOUT BOOK

Enter The Book Number: 1
Enter The Name of The Book: Harry potter
Enter The Author's Name: J K rowling
Enter No. Of Copies : 45
Press 1 to add more books.
Press 2 to return to main menu.
Enter: 1

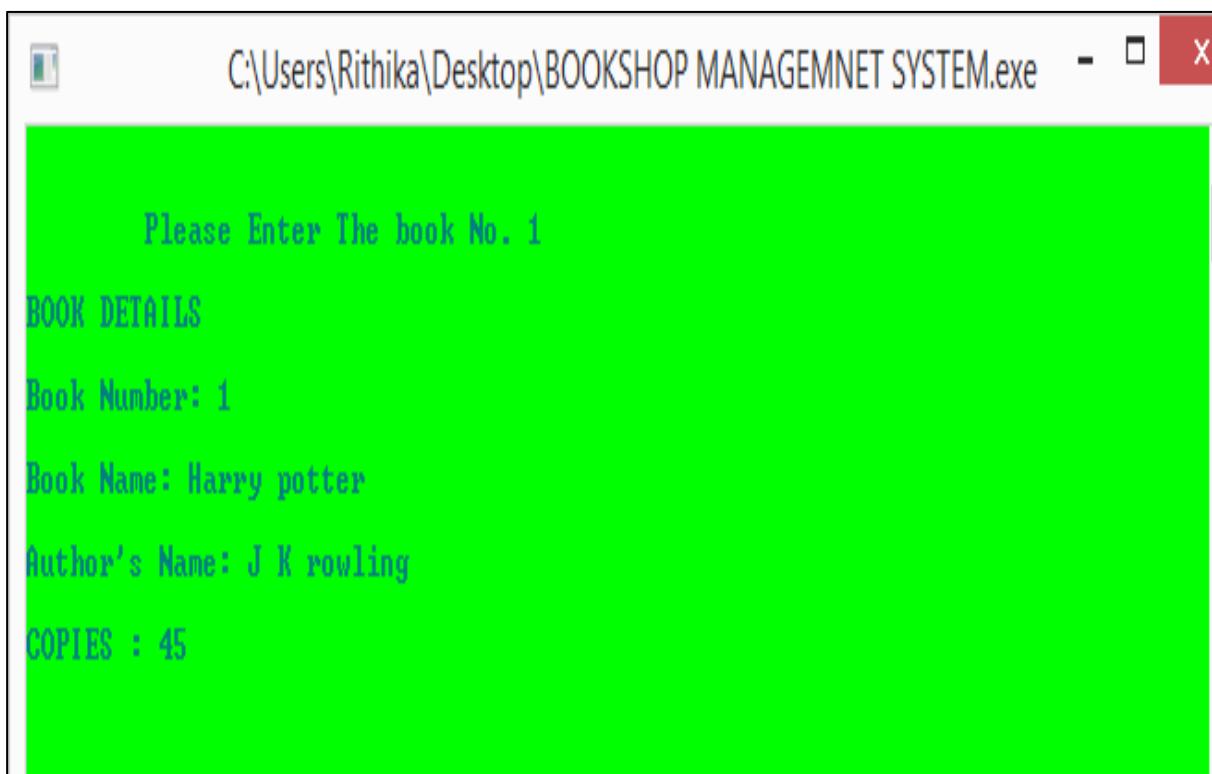
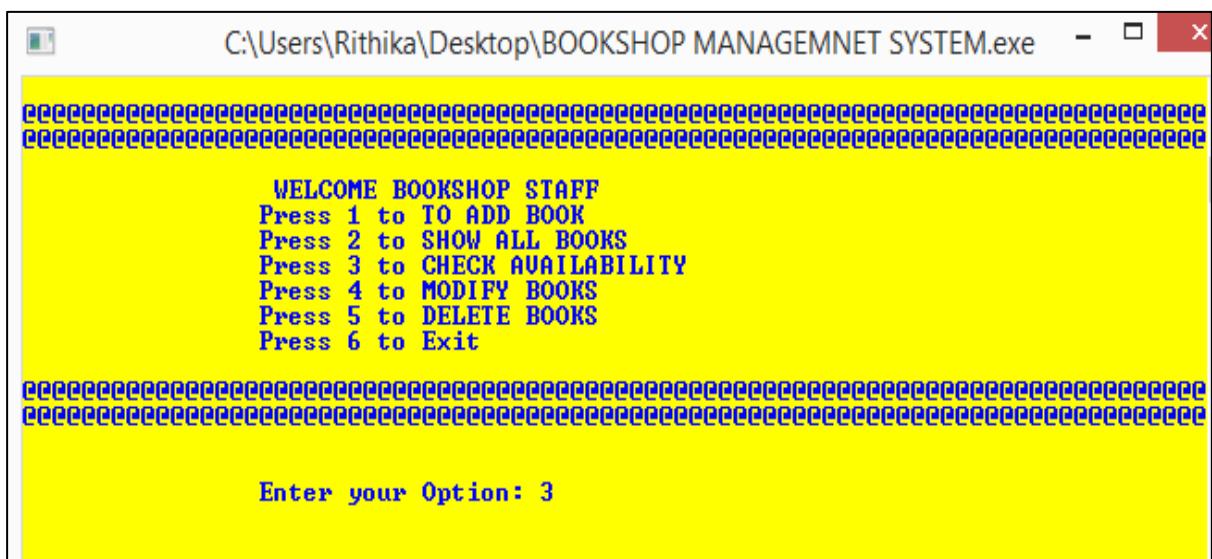
ENTER DETAILS ABOUT BOOK

Enter The Book Number: 2
Enter The Name of The Book: The wimphy kid
Enter The Author's Name: Jeff kinney
Enter No. Of Copies : 55
Press 1 to add more books.
Press 2 to return to main menu.
Enter: 2
```

3. FUNCTION TO SHOW ALL BOOKS:



4. TO CHECK BOOK AVAILABILITY:



5. TO MODIFY BOOK RECORD:

C:\Users\Rithika\Desktop\BOOKSHOP MANAGEMNET SYSTEM.exe

WELCOME TO THE WINNER'S BOOKSHOP
Press 1 to CONTINUE AS BOOKSHOP STAFF
Press 2 to CONTINUE AS CUSTOMER
Press 3 to Exit

Enter your Option: 1

NEW USER? ENTER 0
OLD USER? ENTER 1
ENTER YOUR OPTION: 1

ENTER USERNAME: rithi

ENTER PASSWORD: kathir

WELCOME BOOKSHOP STAFF
Press 1 to TO ADD BOOK
Press 2 to SHOW ALL BOOKS
Press 3 to CHECK AVAILABILITY
Press 4 to MODIFY BOOKS
Press 5 to DELETE BOOKS
Press 6 to Exit

Enter your Option: 4

C:\Users\Rithika\Desktop\BOOKSHOP MANAGEMNET SYSTEM.exe -

MODIFY BOOK

Enter The book number: 2

Book Number: 2

Book Name: The wimphy kid

Author's Name: Jeff kinney

COPIES : 55

Enter The New Details of book

BOOK NUMBER OF THE BOOK TO BE MODIFIED 2

Modify Book Name : wimphy kid

Modify Author's Name: Jeff kenney

Enter No. Of Copies : 75

Record Updated Successfully...

```
C:\USERS\RITHIKA\Desktop\BOOKSHOP MANAGEMNET SYSTEM.exe - >
WELCOME BOOKSHOP STAFF
Press 1 to TO ADD BOOK
Press 2 to SHOW ALL BOOKS
Press 3 to CHECK AVAILABILITY
Press 4 to MODIFY BOOKS
Press 5 to DELETE BOOKS
Press 6 to Exit

Enter your Option: 2

Book LIST

=====
| Book Number | Book Name | Author | Copies |
=====
1          Harry potter   J K rowling      45
2          wimphy kid    Jeff kenney      75
```

6. DELETE BOOK:

The screenshot shows a Windows application window titled "C:\Users\Rithika\Desktop\BOOKSHOP MANAGEMNET SYSTEM.exe". The window has a yellow background and displays the following text:

WELCOME TO THE WINNER'S BOOKSHOP
Press 1 to CONTINUE AS BOOKSHOP STAFF
Press 2 to CONTINUE AS CUSTOMER
Press 3 to Exit

Enter your Option: 1

NEW USER? ENTER 0
OLD USER? ENTER 1
ENTER YOUR OPTION: 1

ENTER USERNAME: rithi
ENTER PASSWORD: kathir

WELCOME BOOKSHOP STAFF
Press 1 to TO ADD BOOK
Press 2 to SHOW ALL BOOKS
Press 3 to CHECK AVAILABILITY
Press 4 to MODIFY BOOKS
Press 5 to DELETE BOOKS
Press 6 to Exit

Enter your Option: 5

DELETE BOOK

Enter The Book's number You Want To Delete: 2

Record Deleted ..

C:\Users\Rithika\Desktop\BOOKSHOP MANAGEMNET SYSTEM.exe -

WELCOME TO THE WINNER'S BOOKSHOP
Press 1 to CONTINUE AS BOOKSHOP STAFF
Press 2 to CONTINUE AS CUSTOMER
Press 3 to Exit

Enter your Option: 1

NEW USER? ENTER 0
OLD USER? ENTER 1
ENTER YOUR OPTION: 1

ENTER USERNAME: rithi

ENTER PASSWORD: kathir

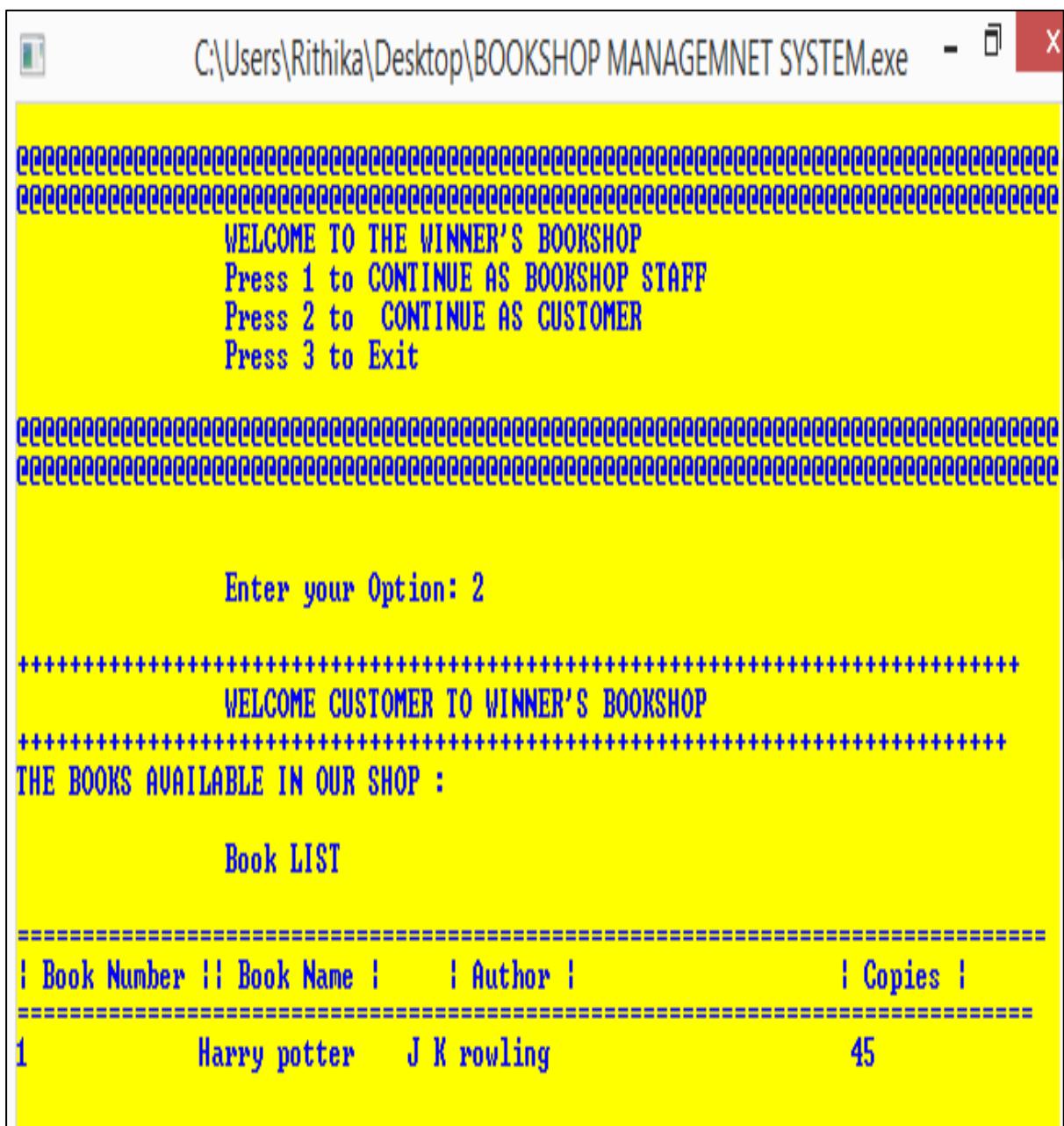
WELCOME BOOKSHOP STAFF
Press 1 to TO ADD BOOK
Press 2 to SHOW ALL BOOKS
Press 3 to CHECK AVAILABILITY
Press 4 to MODIFY BOOKS
Press 5 to DELETE BOOKS
Press 6 to Exit

Enter your Option: 2

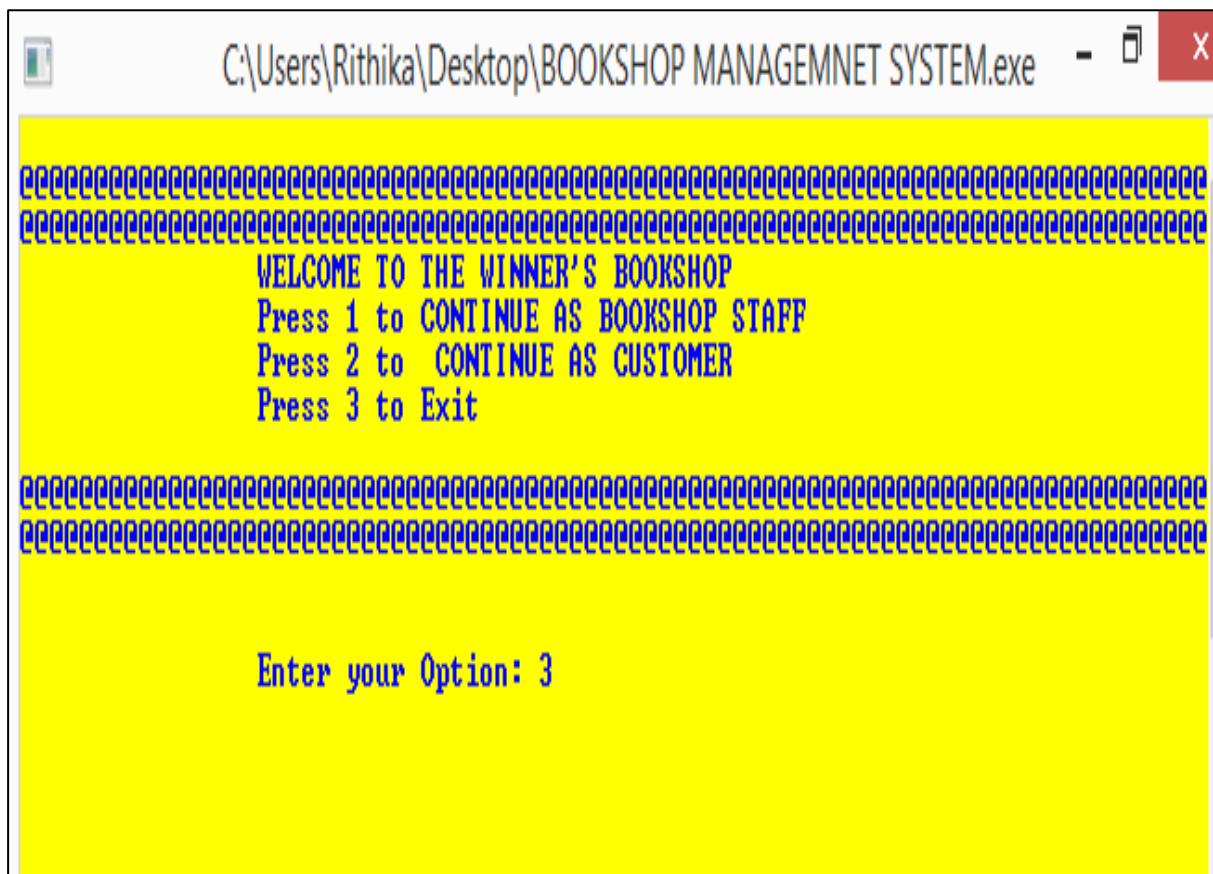
Book LIST

! Book Number !	! Book Name !	! Author !	! Copies !
1	Harry potter	J K rowling	45

7. CUSTOMER :



8. EXIT :



BIBLIOGRAPHY

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- www.google.com
- Geeksforgeeks.com