

LIBRARY MANAGEMENT SYSTEM

```
import java.util.*;
```

```
class LibraryBook{
```

```
    int bookID ;           //declare the variables
```

```
    String title;
```

```
    String author;
```

```
    boolean isIssued=false;    //before issue the value is false
```

```
    static int totalissued=0;
```

```
    void issueBook() {        //method to issue book
```

```
        this.isIssued=true;
```

```
        System.out.println("Book issued successfully.");
```

```
        this.totalissued+=1;    //when the book is issued it becomes true and the number of  
issues are increased
```

```
    }
```

```
    void returnBook(){        //method to take book or make issue as false
```

```
        this.isIssued=false;
```

```
        System.out.println("Book returned successfully.");
```

```
    }
```

```
    void displayBookInfo(){
```

```
        System.out.println("-----BOOK DETAILS-----");
```

```
        System.out.println("Book ID :"+this.bookID);//gives the book id
```

```
        System.out.println("Title :"+this.title); //gives title of book
```

```

        System.out.println("Author :"+this.author); //gives name of author
        if(this.isIssued)
            System.out.println("Status :Issued");    //if the book is issue it prints issued els it prints
available
        else System.out.println("Status :Available");
        System.out.println("-----");
    }

    static void displayTotalIssued() {           //to give how many times the book is issued
        System.out.println("Total number of issues for book "+"="+totalissued);
    }
}

```

```

class Main{                                   //main class
    public static void main(String[] args){    //main method
        Scanner s=new Scanner(System.in);
        int c,id;
        LibraryBook book1=new LibraryBook();    //create object of 1st book
        LibraryBook book2=new LibraryBook();    //create object of 2nd book
        book1.bookID=101;                      //give book id of two books
        book2.bookID=1034;
        book1.title="Adventures of Huckleberry Finn"; //give title of two books
        book2.title="Alice's Adventures in Wonderland";
        book1.author="Mark Twain";              //give author name of two books
    }
}

```

```

book2.author="Lewis Carroll";

System.out.println("LIBRARY MENU");

do{                                //loop to acces the menu

    System.out.println("1.Issue a book\n2.Return a book\n3.Display book details\n4.View the
total number of issued books\n5.Exit the program");

    System.out.print("Enter your choice: "); //ask the choice they want

    c=s.nextInt();

    switch(c){                     //switch to check the input given by user

        case 1:

            System.out.print("Enter book ID to issue: ");

            id=s.nextInt();

            if(book1.bookID==id){

                book1.issueBook();    //first checks which book and then issues

            }                        //if book is not in the library it says not available

            else if(book2.bookID==id){

                book2.issueBook();

            }

            else{

                System.out.println("No book available with book ID: "+id+"in the library." );

                System.out.println("So cannot be issued.");

            }

            break;

        case 2:

            System.out.print("Enter book ID to return: ");

            id=s.nextInt();

            if(book1.bookID==id){

```

```

        book1.returnBook();    //first checks which book then takes the return
    }                        //else it says not in the library
    else if(book2.bookID==id){
        book2.returnBook();
    }
    else{
        System.out.println("No book available with book ID: "+id+"in the library." );
        System.out.println("So cannot be returned.");
    }
    break;
case 3:
    System.out.print("Enter book ID to get details: ");
    id=s.nextInt();
    if(book1.bookID==id){
        book1.displayBookInfo();    //first checks which book then takes the gives the
details
    }                        //else it says not in the library
    else if(book2.bookID==id){
        book2.displayBookInfo();
    }
    else{
        System.out.println("No book available with book ID: "+id+"in the library." );
        System.out.println("So cannot be displayed.");
    }
    break;
case 4:

```

```
        book1.displayTotalIssued();        //gives total issues by the library
        break;
    case 5:
        break;
    default:
        System.out.println("Invalid choide");
    }
}while(c!=5);        //breaks if the values is 5 becaues the user wants to exit
System.out.println("Thank you for visiting!");
}
}
```