// Library Management Project in java. . . . . .

import java.util.ArrayList;

class Book{

    public String name, author ;

    public Book(String name , String author){

        this.name = name ;

        this.author = author ;

    }

    public String toString(){

        return "Book{" + "name='" + name + '\'' + ", author='" + author + '\'' + '}' ;

    }

}

class MyLibrary {

    ArrayList<Book> books;

    MyLibrary(ArrayList<Book> books) {

        this.books = books;

    }

    public void addBook(Book book) {

        System.out.println("The book has been added in the library");

        this.books.add(book);

    }

    public void issueBook(Book book, String issued\_to) {

        System.out.println("The book has been issued from the library to " + issued\_to);

        this.books.remove(book);

    }

    public void returnBook(Book b , String issued\_by){

        System.out.println("The book has been returned in the library by " + issued\_by);

        this.books.add(b) ;

    }

}

public class Library\_Management {

    public static void main(String[] args) {

        ArrayList<Book> bk = new ArrayList<>();

        Book b1 = new Book("Java", "Harry");

        bk.add(b1) ;

        Book b2 = new Book("C++", "Oracle");

        bk.add(b2) ;

        Book b3 = new Book("Let Us C", "Tata");

        bk.add(b3) ;

        Book b4 = new Book("DSA", "Mac Graw Hill");

        bk.add(b4) ;

        Book b5 = new Book("OS", "Owe");

        bk.add(b5) ;

        MyLibrary myLibrary = new MyLibrary(bk) ;

        myLibrary.addBook(new Book("CSA", "Amit"));

        System.out.println(myLibrary.books);

        myLibrary.issueBook(b5 , "Manish");

        System.out.println(myLibrary.books);

    }

}

[Running] cd "d:\Visual\_Studio\_Code\_1.41.0\Advance java -2\com\company\" && javac Library\_Management.java && java Library\_Management

The book has been added in the library

[Book{name='Java', author='Harry'}, Book{name='C++', author='Oracle'}, Book{name='Let Us C', author='Tata'}, Book{name='DSA', author='Mac Graw Hill'}, Book{name='OS', author='Owe'}, Book{name='CSA', author='Amit'}]

The book has been issued from the library to Manish

[Book{name='Java', author='Harry'}, Book{name='C++', author='Oracle'}, Book{name='Let Us C', author='Tata'}, Book{name='DSA', author='Mac Graw Hill'}, Book{name='CSA', author='Amit'}]

[Done] exited with code=0 in 15.609 seconds