

## Library Management System

1. Design the schema for the following tables:
  - a. book(book\_id, title,category,author);
  - b. student(student\_id,name,dept\_name,year,semester);
  - c. issue(student\_id,book\_id,issue\_date,return\_date);
2. Load data into these tables:
  - a. 2-3 tuples in the book table.
  - b. 2-3 tuples in the student table.
  - c. 5-6 or more tuples in issue table ensuring that the queries below will get some results.
3. Create a Java-J2EE project and do the following :
  - a. Home.jsp file to give two options “Add a book” and “Issue a book”.This should redirect to corresponding jsp file when clicked.
  - b. Add.jsp file to take input as book\_id,title,category,author. Then check if the book\_id already exists,otherwise add these book details to the book table using a servlet named AddServlet.java. Print “Book is added successfully” after adding in the new jsp page named AddResult.jsp.
  - c. Issue.jsp file to take input as student\_id,book\_id,issue\_date. Then add these issue details in the issue table if and only if a student exists(check student\_id in student table) using a servlet named IssueServlet.java. Print “Book issued successfully” after adding in the new jsp page named IssueResult.jsp.  
(Here return\_date can be null)

## Submissions

1. .sql file for creating and loading data ( question 1 & 2).
2. Complete project with screenshots as .zip file named with roll number ( question 3).
3. Submission due time : Tuesday (3rd November) 8:00 am
4. We will run plagiarism for all the submissions.

## Note :

1. Servlet Mapping snippet code should be added in the web.xml ( for both AddServlet and IssueServlet).
2. Home.jsp should be added in the welcome-file-list tag of web.xml.
3. Postgres jdbc jar file should be added in the build path and in the lib folder of web-inf.