

# Database Systems Lab

---

## SESSION 6

### Library Management System Application

In this lab session, you will be delivering a complete library management system. The application should support following functionality in menu driven approach :

- 1.Add book
- 2.Add student
- 3.Delete Book
- 4.Delete Student
- 5.Issue Book
- 6.Search Book by isbn
- 7.Search Book by title
- 8.Search student by rollno
- 9.Search student by name
- 10.Exit

#### Constraints :

- 1.All the above functionalities related to Book and Student should use indexing.
- 2.delete\_book must check the issue data. If the book is already issued then you can not perform delete operation.
3. search\_book by isbn and search book by title should print following details :  
book details  
issue status  
and if book is issued then student details holding that book.
- 4.Issue\_book must ensure the book and student both values are available.

#### General Instructions :

- You can use your previous lab files as a reference to create this application.
- Use given testcase.in file to test your application.
- Your code must support menu-driven functionality.
- You can use simple\_tester.c referring to sample\_output.pdf to test your functions.
- You must implement libsys\_tester.c referring to testcase.in to test your code.

#### Submission Instructions :

You are expected to upload following files :

1. **rollno\_libsys.c** : This should support only libsys.h implementations
2. **rollno\_menu.c** : This file should support menu driven functionality calling functions from roll\_libsys.c

**You are expected to demo this project along with your mid term exam for database labs.**