#### Assignments 1

Implement a menu driven program using Daos. Provide following functionalities.

Add Book

**Update Book** 

Delete Book by Id

Find Book by Id

Find All Books

Find Books by Subject

Find All Subjects

Add Customer

Find Customer by Email

Find Customer by Email And Password

Change Password

**Update Customer** 

Delete Customer by Id

### Assignments 2

Create spring bean class "Arithmetic" with fields "num1" and "num2". Write business logic methods "int add()", subtract(), multiply(), divide(). Use annotation config to create Arithmetic bean "arith" with fixed values e.g. num1=22, num2=7. In main(), access the bean and test all above methods.

### Assignments 3

Create an interface Sender with a method void send(double value); Implement the method in three bean classes i.e. TcpSender, HttpSender, and UdpSender. In each implementation, write println() statement to print the given value on the console. Access these bean objects (e.g. ts = ctx.getBean(TcpSender.class)) into main class and call their send() methods. What error we get if we access ctx.getBean(Sender.class)? Resolve the error using @Primary on any one of the bean i.e. @Primary with @Bean method.

## Assignments 4

- 1. Create an interface Sender with a method <code>void send(double value)</code>; . Implement the method in three bean classes (using @Component) i.e. TcpSender, HttpSender, and UdpSender. In each implementation, write println() statement to print the given value on the console. Access these bean objects (e.g. ts = ctx.getBean(TcpSender.class)) into main class and call their send() methods. What error we get if we access ctx.getBean(Sender.class)? Resolve the error using @Primary on any one of the bean.
- 2. In earlier Logger classwork, use @Autowired on Logger field in AccountImpl. If you have set logger manually in main code, comment those lines. Comment @Primary on bean class (if written). Observe the error and solve it.
- 3. Implement JDBC Daos i.e. BookDao and CustomerDao for BookShop application using Spring

# Assignments 5

- 1. Complete BookDao and CustomerDao implementations.
- 2. Create a login page to input email and password. Check if user is valid or not (using CustomerDao). On welcome page display "Welcome" or "Login Failed" message.

## Assignments 6

- 1. Complete Mobiles & Users REST services for Mobile shop.
- 2. Complete all REST services for Book shop

## Assignments 7

1. Create categories table (id, title, description). Example categories are Electronics, Fashion, Grocery. Create products table (id, name, price, category\_id). Create appropriate entity mappings. Create a spring rest application to perform crud operations on categories and products.

2. Create Mobile shop REST apis.

## Assignments 8

CRUD rest apis.

1. Create categories table (id, title, description). Example categories are Electronics, Fashion, Grocery. Create products table (id, name, price, category\_id). Create appropriate entity mappings. Create a web mvc application to show all categories. If any category is clicked, on next page display products for that category.

Also provide button for creating new product. Create form to add new product. Do validatation for new product.

2. Create tables users(id, firstname, lastname, email, password) and tweets(id, text, hashtag, tweet\_datetime, user\_id). Assume that one tweet will have only one hashtag. Create appropriate entities and repositories. Create appropriate