**Exercise 9: Creating a Spring Boot Application**

**Scenario:**

You need to create a Spring Boot application for the library management system to simplify configuration and deployment.

**Steps:**

1. **Create a Spring Boot Project:**

**Spring Initializr** is used to create a new Spring Boot project named **LibraryManagement**.

1. **Add Dependencies:**

Dependencies for **Spring Web, Spring Data JPA, and H2 Database are included**.

1. **Create Application Properties:**

Configuring database connection properties in **application.properties**.

1. **Define Entities and Repositories:**

**Book** entity and **BookRepository** interface is created.

1. **Create a REST Controller:**

A **BookController** class to handle CRUD operations is created.

1. **Run the Application:**

The Spring Boot application and test the REST endpoints is executed.

**Testing the REST Endpoints**

* Open a browser or use a tool like Postman to test the endpoints:
  + **GET** http://localhost:8080/api/books - List all books
  + **GET** http://localhost:8080/api/books/{id} - Get a book by ID
  + **POST** http://localhost:8080/api/books - Create a new book (with a JSON body)
  + **PUT** http://localhost:8080/api/books/{id} - Update an existing book (with a JSON body)
  + **DELETE** http://localhost:8080/api/books/{id} - Delete a book by ID