**Exercise 1: Configuring a Basic Spring Application**

**Set Up a Spring Project:**

<project xmlns="http://maven.apache.org/POM/4.0.0"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://maven.apache.org/POM/4.0.0

http://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>com.library</groupId>

<artifactId>LibraryManagement</artifactId>

<version>1.0-SNAPSHOT</version>

<dependencies>

<!-- Spring Core -->

<dependency>

<groupId>org.springframework</groupId>

<artifactId>spring-context</artifactId>

<version>5.3.34</version>

</dependency>

</dependencies>

</project>

**Define Repository and Service Classes**

package com.library.repository;

import org.springframework.stereotype.Repository;

@Repository

public class BookRepository {

public void fetchBooks() {

System.out.println("📚 Fetching books from the repository...");

}

}

package com.library.service;

import org.springframework.beans.factory.annotation.Autowired;

import org.springframework.stereotype.Service;

import com.library.repository.BookRepository;

@Service

public class BookService {

private BookRepository bookRepository;

public void listBooks() {

System.out.println("🔎 Inside BookService...");

bookRepository.fetchBooks();

}

}

**Main Class**

package com.library;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

import org.springframework.context.ApplicationContext;

import com.library.service.BookService;

@SpringBootApplication

public class LibraryManagementApplication {

public static void main(String[] args) {

ApplicationContext context = SpringApplication.run(LibraryManagementApplication.class, args);

BookService bookService = context.getBean(BookService.class);

bookService.listBooks();

}

}

**Output:**

Inside BookService...

Fetching books from the repository...