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

**Scenario:**

My company is developing a web application for managing a library. I need to use the Spring Framework to handle the backend operations.

**PROJECT:**

**1. Create a Maven Project**

1. Open **Eclipse IDE**.
2. Go to File > New > Maven Project.
3. Check **"Create a simple project"** > Click **Next**.
4. Fill in:
   * **Group Id**: com.library
   * **Artifact Id**: LibraryManagement
   * **Packaging**: jar
5. Click **Finish**.

**2. Edit pom.xml**

<dependencies>

<dependency>

<groupId>org.springframework</groupId>

<artifactId>spring-context</artifactId>

<version>5.3.36</version>

</dependency>

</dependencies>

**3. Create Java Classes**

**BookRepository.java**

package com.library.repository;

public class BookRepository {

public String getBook() {

return "Spring in Action";

}

}

**BookService.java**

package com.library.service;

import com.library.repository.BookRepository;

public class BookService {

private BookRepository bookRepository;

public void setBookRepository(BookRepository bookRepository) {

this.bookRepository = bookRepository;

}

public void displayBook() {

System.out.println("Book: " + bookRepository.getBook());

}

}

**MainApp.java**

package com.library;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

import com.library.service.BookService;

public class LibraryMainApp {

public static void main(String[] args) {

ApplicationContext context = new ClassPathXmlApplicationContext("applicationContext.xml");

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

bookService.displayBook();

}

}

**4. Create applicationContext.xml**

<?xml version="1.0" encoding="UTF-8"?>

<beans xmlns="http://www.springframework.org/schema/beans"

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

xsi:schemaLocation="

http://www.springframework.org/schema/beans

http://www.springframework.org/schema/beans/spring-beans.xsd">

<bean id="bookRepository" class="com.library.repository.BookRepository"/>

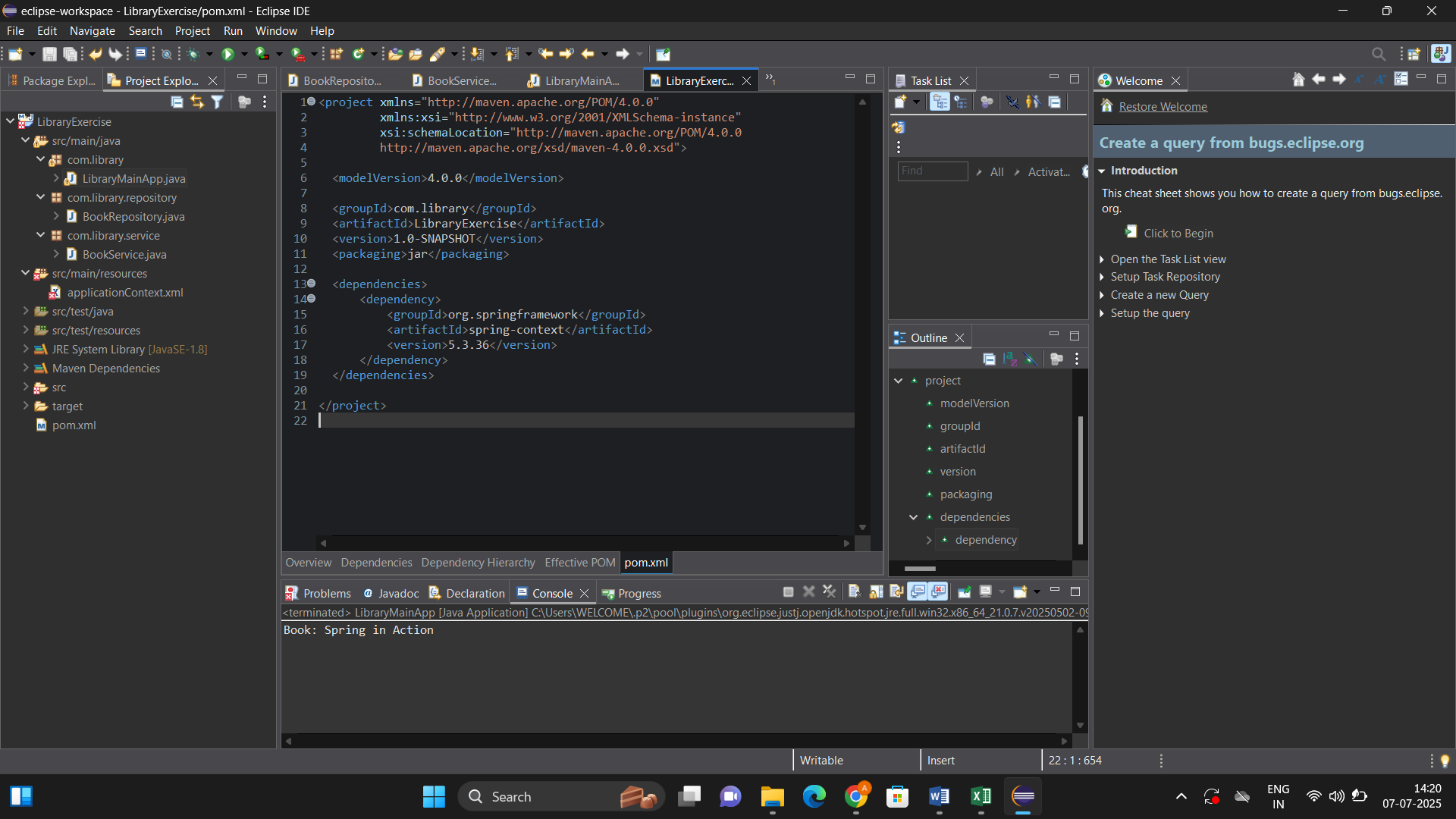
<bean id="bookService" class="com.library.service.BookService">

<property name="bookRepository" ref="bookRepository"/>

</bean>

</beans>

**Output ScreenShot:**

****