**WEEK – 3 SPRING CORE MAVEN**

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

**Scenario:**

Developing a web application for managing a library and using the Spring Framework to handle the backend operations.

**Set Up a Spring Project:**

<dependencies>  
 <!-- Spring Core Dependency -->  
 <dependency>  
 <groupId>org.springframework</groupId>  
 <artifactId>spring-context</artifactId>  
 <version>5.3.34</version>  
 </dependency>  
</dependencies>

**Configure the Application Context:**

1. <?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.beginsecure.main.repository.BookRepository"/>  
     
    <bean id="bookService" class="com.beginsecure.main.service.BookService">  
    <property name="bookRepository" ref="bookRepository"/>  
    </bean>  
     
   </beans>

**Define Service and Repository Classes:**

**BookService.java**

1. package com.beginsecure.main.service;  
     
   import com.beginsecure.main.repository.BookRepository;  
     
   public class BookService {  
    private BookRepository bookRepository;  
     
    public void setBookRepository(BookRepository bookRepository) {  
    this.bookRepository = bookRepository;  
    }  
     
    public void showBooks() {  
    bookRepository.displayBooks();  
    }  
   }

**BookRepository**.

1. package com.beginsecure.main.repository;  
     
   public class BookRepository {  
    public void displayBooks() {  
    System.*out*.println("Displaying books from repository.");  
    }  
   }

**Run the Application:**

1. package com.beginsecure.main;  
     
   import com.beginsecure.main.service.BookService;  
   import org.springframework.context.ApplicationContext;  
   import org.springframework.context.support.ClassPathXmlApplicationContext;  
     
   public class Main {  
    public static void main(String[] args) {  
    ApplicationContext context = new ClassPathXmlApplicationContext("applicationContext.xml");  
    BookService service = (BookService) context.getBean("bookService");  
    service.showBooks();  
    }  
   }

**Sample Output:**

