**Exercise 2: Implementing Dependency Injection**

bookRepository :

package com.library.repository;

public class BookRepository {

    public String getBook() {

        return "Book by Hemanth";

    }

}

bookService :

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());

    }

}

ApplicationContext.xml :

<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.BookRepository" />

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

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

    </bean>

</beans>

Main.java :

package com.library;

import org.springframework.context.ApplicationContext;

import org.springframework.context.support.ClassPathXmlApplicationContext;

import com.library.service.BookService;

public class Main {

    public static void main(String[] args) {

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

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

        bookService.displayBook();

    }

}

Output :

