# Exercise 2: Implementing Dependency Injection

## Objective

To demonstrate dependency injection in Spring by wiring BookRepository into BookService using setter injection via Spring’s IoC container.

## Steps Performed

Reused the Maven project from Exercise 1: Configuring a Basic Spring Application.  
  
Ensured that BookService has a setter method for BookRepository:

public void setBookRepository(BookRepository bookRepository) {  
 this.bookRepository = bookRepository;  
}

Updated the Spring XML Configuration (applicationContext.xml) to inject BookRepository into BookService:

<bean id="bookRepository" class="com.library.repository.BookRepository" />  
  
<bean id="bookService" class="com.library.service.BookService">  
 <property name="bookRepository" ref="bookRepository" />  
</bean>

In MainApp.java, loaded the Spring context and retrieved the BookService bean:

ApplicationContext context = new ClassPathXmlApplicationContext("applicationContext.xml");  
BookService service = context.getBean("bookService", BookService.class);  
service.showBooks();

## Output

The console output after running the application confirms that the dependency injection worked successfully.

📸 IntelliJ Screenshot Showing the Output:

