

Exercise 2: Implementing Dependency Injection
Objective: Demonstrate dependency injection in Spring.

Solution:

Define interfaces and classes:

```
java
public interface MessageService {
    String getMessage();
}

public class EmailService implements MessageService {
    public String getMessage() {
        return "Email message";
    }
}
```

Dependent class:

```
java
public class MessageProcessor {
    private MessageService service;

    // Setter injection
    public void setService(MessageService service) {
        this.service = service;
    }

    public void process() {
        System.out.println(service.getMessage());
    }
}
```

XML configuration (applicationContext.xml):

```
xml
<bean id="emailService" class="com.example.EmailService"/>
<bean id="messageProcessor" class="com.example.MessageProcessor">
    <property name="service" ref="emailService"/>
</bean>
```