**Exercise 1: Logging Error Messages and Warning Levels**

**Task:**

Write a Java application that demonstrates logging error messages and warning levels using SLF4J.

Step-by-Step Solution:

1. Add SLF4J and Logback dependencies to your `pom.xml` file:

2. Create a Java class that uses SLF4J for logging:

**Solution:**

**LoggingExample.java:**

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

public class LoggingExample {

private static final Logger logger = LoggerFactory.getLogger(LoggingExample.class);

public static void main(String[] args) {

logger.error("This is an error message");

logger.warn("This is a warning message");

}

}

**logback.xml:**

<configuration>

<appender name="STDOUT" class="ch.qos.logback.core.ConsoleAppender">

<encoder>

<pattern>%d{yyyy-MM-dd HH:mm:ss} [%thread] %-5level %logger{36} - %msg%n</pattern>

</encoder>

</appender>

<root level="debug">

<appender-ref ref="STDOUT" />

</root>

</configuration>

<build>

<plugins>

<plugin>

<groupId>org.codehaus.mojo</groupId>

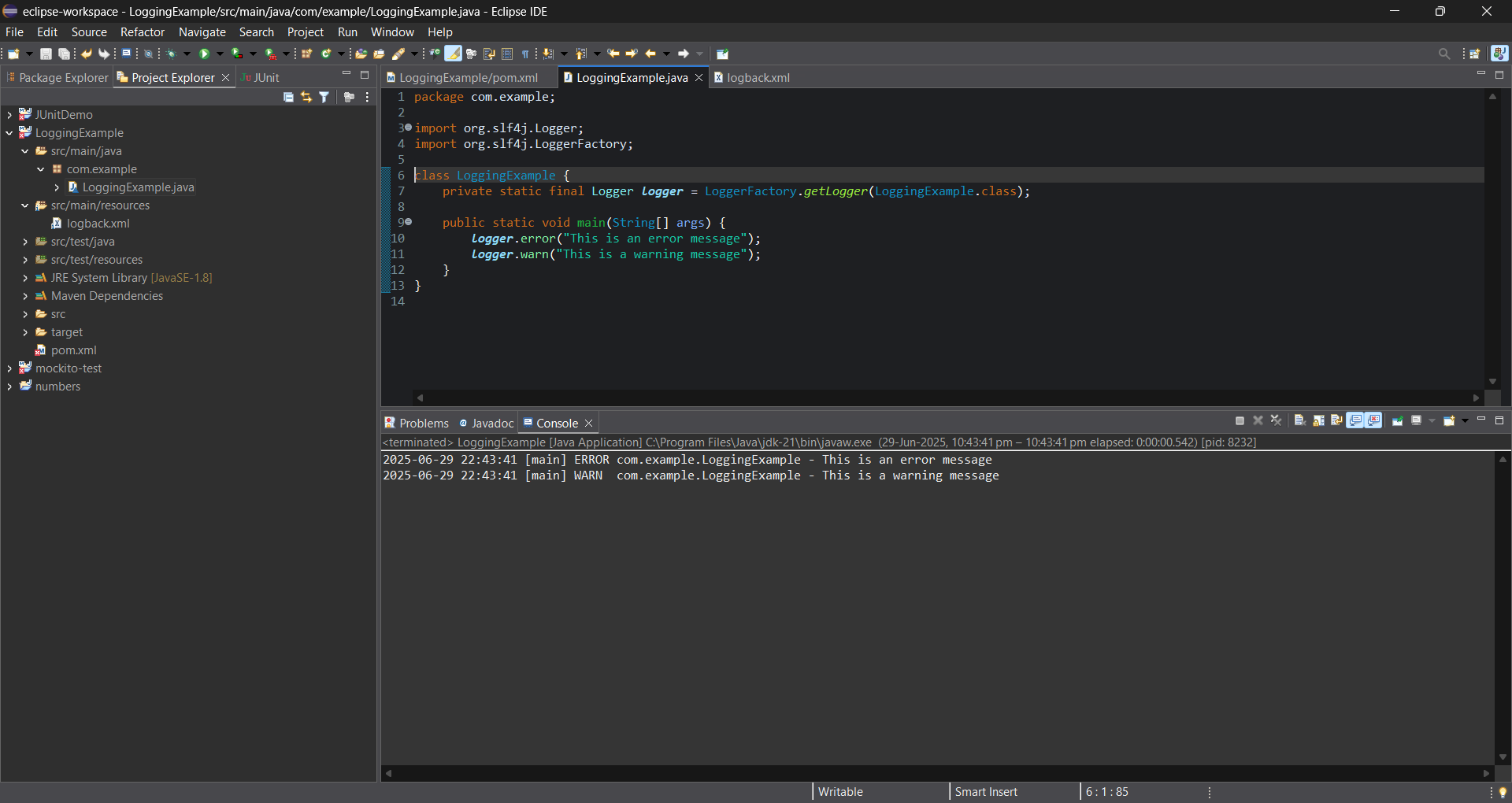
<artifactId>exec-maven-plugin</artifactId>

<version>3.0.0</version>

</plugin>

</plugins>

</build>

**Output:**