# Exercise 1: Logging Error Messages and Warning Levels

**Step 1: Add SLF4J and Logback to pom.xml**

<dependencies>

<!-- JUnit 5 -->

<dependency>

<groupId>org.junit.jupiter</groupId>

<artifactId>junit-jupiter-api</artifactId>

<version>5.10.0</version>

<scope>test</scope>

</dependency>

<dependency>

<groupId>org.junit.jupiter</groupId>

<artifactId>junit-jupiter-engine</artifactId>

<version>5.10.0</version>

<scope>test</scope>

</dependency>

<!-- Mockito -->

<!-- https://mvnrepository.com/artifact/org.mockito/mockito-junit-jupiter -->

<dependency>

<groupId>org.mockito</groupId>

<artifactId>mockito-junit-jupiter</artifactId>

<version>5.18.0</version>

<scope>test</scope>

</dependency>

</dependencies>

**Step 2: Java Class Using SLF4J for Logging**

package io.slf4j;

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");

}

}

**Step 3: (Optional but Recommended): Customize 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>

**Output:**

