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

Step1: Create a New Maven Project in Eclipse:

Go to File → New → Project…

Select Maven Project → Click Next

Choose Create a simple project (skip archetype selection) → Next

Fill:

* Group Id: com.example
* Artifact Id: SLF4JLoggingExample

Click Finish

Step2: Add Dependencies to pom.xml:

<project xmlns="http://maven.apache.org/POM/4.0.0"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://maven.apache.org/POM/4.0.0

https://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>com.example</groupId>

<artifactId>SLF4JLoggingExample</artifactId>

<version>1.0-SNAPSHOT</version>

<properties>

<maven.compiler.source>1.8</maven.compiler.source>

<maven.compiler.target>1.8</maven.compiler.target>

</properties>

<dependencies>

<dependency>

<groupId>org.slf4j</groupId>

<artifactId>slf4j-api</artifactId>

<version>1.7.30</version>

</dependency>

<dependency>

<groupId>ch.qos.logback</groupId>

<artifactId>logback-classic</artifactId>

<version>1.2.3</version>

</dependency>

</dependencies>

</project>

Step3: Create a package com.example in src/main/java and create following class:

**LoggingExample.java:**

package com.example;

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");

}

}

Step4: Run the Program:

1. Right-click on LoggingExample.java

2. Select Run As → Java Application

**Output:**

