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

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

Step-1 :

1. A new Maven Project ‘LoggingDemo’ is created.
2. SLF4J and Logback dependencies are added to ‘pom.xml’ file:
3. <project xmlns="http://maven.apache.org/POM/4.0.0"
4. xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
5. xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">
6. <modelVersion>4.0.0</modelVersion>
7. <groupId>com.example</groupId>
8. <artifactId>LoggingDemo</artifactId>
9. <version>1.0-SNAPSHOT</version>
10. <dependencies>
11. <!-- SLF4J API -->
12. <dependency>
13. <groupId>org.slf4j</groupId>
14. <artifactId>slf4j-api</artifactId>
15. <version>1.7.30</version>
16. </dependency>
17. <!-- Logback (SLF4J implementation) -->
18. <dependency>
19. <groupId>ch.qos.logback</groupId>
20. <artifactId>logback-classic</artifactId>
21. <version>1.2.3</version>
22. </dependency>
23. </dependencies>
24. </project>

Step-2 : A Java class ‘LoggingExample’ is created.

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");

}

}

**Output :**

**A screenshot of a computer

AI-generated content may be incorrect.**