**Week 2 Logging using SLF4J hands on**

**Name: Adi Jain**

**Superset ID: 6390400**

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

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

**Steps:**

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

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

**Code**

<?xml version="1.0" encoding="UTF-8"?>  
<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 http://maven.apache.org/xsd/maven-4.0.0.xsd">  
 <modelVersion>4.0.0</modelVersion>  
  
 <groupId>org.example</groupId>  
 <artifactId>loggingdemo</artifactId>  
 <version>1.0-SNAPSHOT</version>  
  
 <dependencies>  
 <!-- SLF4J API -->  
 <dependency>  
 <groupId>org.slf4j</groupId>  
 <artifactId>slf4j-api</artifactId>  
 <version>1.7.30</version>  
 </dependency>  
  
 <!-- Logback implementation -->  
 <dependency>  
 <groupId>ch.qos.logback</groupId>  
 <artifactId>logback-classic</artifactId>  
 <version>1.2.3</version>  
 </dependency>  
 </dependencies>  
  
  
 <properties>  
 <maven.compiler.source>21</maven.compiler.source>  
 <maven.compiler.target>21</maven.compiler.target>  
 <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>  
 </properties>  
  
</project>

**Pom.xml**

package org.example;  
  
public class Main {  
 public static void main(String[] args) {  
 System.*out*.printf("Hello and welcome!");  
 for (int i = 1; i <= 5; i++) {  
  
   
 System.*out*.println("i = " + i);  
 }  
 }

**Main.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");  
 }  
}

**LoggingExample.java**

**Output**

