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

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

**pom.xml**

<?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>6\_Exercise\_1</artifactId>

<version>1.0-SNAPSHOT</version>

<properties>

<maven.compiler.source>22</maven.compiler.source>

<maven.compiler.target>22</maven.compiler.target>

<project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>

</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>

**src/main/java/org/example/LoggingExample.java**

package org.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) {

System.*out*.println("----output--------");

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

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

}

}

**src/main/resources/logback.xml**

<configuration>

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

<encoder>

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

</encoder>

</appender>

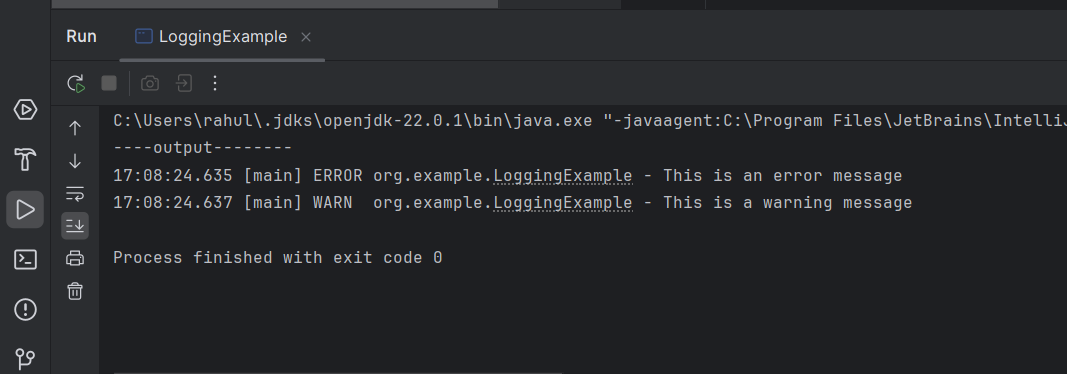
<root level="debug">

<appender-ref ref="STDOUT" />

</root>

</configuration>

**Output:**

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