Hands-on 2:

SLF4J logging framework:

Exercise 1: Logging Error Messages and Warning Levels:

File name: 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

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

<modelVersion>4.0.0</modelVersion>

<groupId>com.example</groupId>

<artifactId>slf4j-logging-demo</artifactId>

<version>1.0-SNAPSHOT</version>

<dependencies>

<!-- SLF4J API -->

<dependency>

<groupId>org.slf4j</groupId>

<artifactId>slf4j-api</artifactId>

<version>2.0.9</version>

</dependency>

<!-- SLF4J Binding: Logback -->

<dependency>

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

<artifactId>logback-classic</artifactId>

<version>1.4.11</version>

</dependency>

</dependencies>

</project>

File name: App.java

package com.example;

public class App {

public static void main(String[] args) {

LoggingService service = new LoggingService();

service.performTask();

}

}

File name: LoggingService.java

package com.example;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

public class LoggingService {

private static final Logger logger = LoggerFactory.getLogger(LoggingService.class);

public void performTask() {

logger.info("Task started.");

try {

int result = 10 / 0; // Simulate an error

} catch (ArithmeticException e) {

logger.error("An error occurred: Division by zero", e);

}

logger.warn("This is a warning: Resource usage is high.");

logger.info("Task completed.");

}

}

OUTPUT:

