**Exercise 1: Logging Error Messages and Warning Levels using SLF4J**

# Objective

# Create a Java application that demonstrates how to log error and warning messages using the SLF4J logging framework with Logback as the backend.

# Step-by-Step Instructions

## Step 1: Add SLF4J & Logback Dependencies to pom.xml

<dependencies>  
 <!-- SLF4J API -->  
 <dependency>  
 <groupId>org.slf4j</groupId>  
 <artifactId>slf4j-api</artifactId>  
 <version>1.7.30</version>  
 </dependency>  
  
 <!-- Logback (SLF4J Binding Implementation) -->  
 <dependency>  
 <groupId>ch.qos.logback</groupId>  
 <artifactId>logback-classic</artifactId>  
 <version>1.2.3</version>  
 </dependency>  
</dependencies>

## Step 2: Create Java Class with SLF4J Logging

File: src/main/java/com/example/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");  
 logger.info("This is an informational message");  
 }  
}

## Step 3: Run the Project

Using IntelliJ:

- Right-click LoggingExample.java → Run.

. Run the app:

mvn exec:java

## Expected Output

