SL4J Logging exercises

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Exercise 1: Logging Error Messages and Warning Levels using SLF4J

Task: Create a Java application that logs error and warning messages using SLF4J.

Step 1: Add dependencies to pom.xml (for a Maven project)

```xml
<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>
```

Step 2: Create a Java class with logging

LoggingExample.java

```java
import org.slf4j.Logger;
 import org.slf4j.LoggerFactory;

public class LoggingExample {
```

```java
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");
}


}
```

Step 3 : Create logback.xml file

You can create a logback.xml in src/main/resources for formatting:

```xml
<appender name="CONSOLE"
class="ch.qos.logback.core.ConsoleAppender">
   <encoder>
      <pattern>%d{HH:mm:ss} %-5level [%thread] %logger{36} -
%msg%n</pattern>
   </encoder>
</appender>

<root level="debug">
   <appender-ref ref="CONSOLE" />
</root>
```

Output:

When we run the program, it will print:

HH:mm:ss ERROR [main] LoggingExample - This is an error message

HH:mm:ss WARN [main] LoggingExample - This is a warning message.