Exercise 1: Logging Error Messages and Warning Levels

<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>logging-example</artifactId>

<version>1.0-SNAPSHOT</version>

<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>

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("Critical failure detected in system module!");

logger.warn("Potential issue: Disk usage exceeds 80%");

logger.info("System started successfully.");

logger.debug("Debugging initialization: all variables set.");

logger.trace("Trace log: Entering application.");

}

}

<configuration>

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

<encoder>

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

</encoder>

</appender>

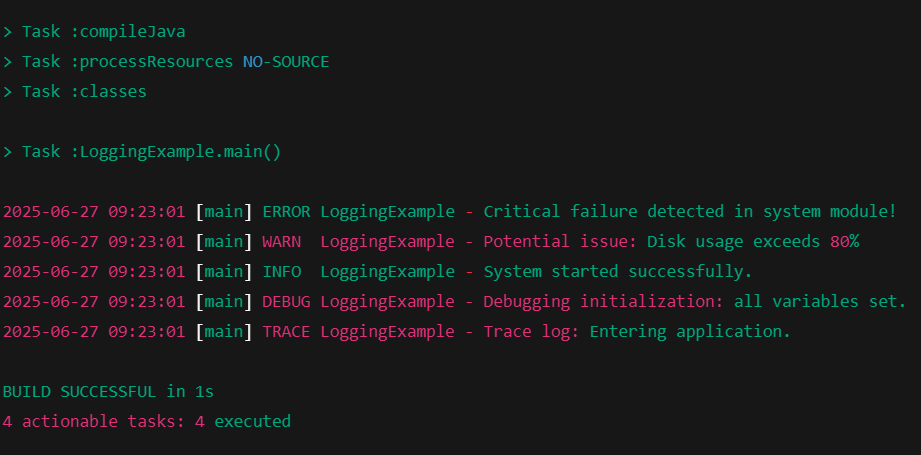
<root level="trace">

<appender-ref ref="STDOUT"/>

</root>

</configuration>

**Output:**

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