**Exercise 3: Using Different Appenders**

Task: Write a Java application that demonstrates using different appenders with SLF4J.

**LoggingDemo.java :-**

package org.example1;  
  
import org.slf4j.Logger;  
import org.slf4j.LoggerFactory;  
  
public class LoggingDemo {  
  
 private static final Logger *logger* = LoggerFactory.*getLogger*(LoggingDemo.class);  
  
 public static void main(String[] args) {  
 *logger*.debug("This is a DEBUG message");  
 *logger*.info("This is an INFO message");  
 *logger*.warn("This is a WARN message");  
 *logger*.error("This is an ERROR message");  
 }  
}

**logback.xml :-**

<configuration>  
 <appender name="console" class="ch.qos.logback.core.ConsoleAppender">  
 <encoder>  
 <pattern>%d{HH:mm:ss.SSS} [%thread] %-5level %logger{36} - %msg%n</pattern>  
 </encoder>  
 </appender>  
  
 <appender name="file" class="ch.qos.logback.core.FileAppender">  
 <file>logs/app.log</file>  
 <append>true</append>  
 <encoder>  
 <pattern>%d{yyyy-MM-dd HH:mm:ss} %-5level %logger{36} - %msg%n</pattern>  
 </encoder>  
 </appender>  
  
 <root level="debug">  
 <appender-ref ref="console"/>  
 <appender-ref ref="file"/>  
 </root>  
</configuration>

**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>org.example</groupId>  
 <artifactId>logback-multiappender-demo</artifactId>  
 <version>1.0-SNAPSHOT</version>  
  
 <properties>  
 <maven.compiler.source>17</maven.compiler.source>  
 <maven.compiler.target>17</maven.compiler.target>  
 </properties>  
  
 <dependencies>  
 <!-- SLF4J API -->  
 <dependency>  
 <groupId>org.slf4j</groupId>  
 <artifactId>slf4j-api</artifactId>  
 <version>1.7.30</version>  
 </dependency>  
  
 <!-- Logback Classic for logging implementation -->  
 <dependency>  
 <groupId>ch.qos.logback</groupId>  
 <artifactId>logback-classic</artifactId>  
 <version>1.2.3</version>  
 </dependency>  
 </dependencies>  
  
</project>

**Output :-**

