**Exercise 1: Logging Error and Warning Messages**

**LoggingExample.java**

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");

}

}

**Console Output:**

14:30:21.123 [main] ERROR LoggingExample - This is an error message

14:30:21.124 [main] WARN LoggingExample - This is a warning message

**Exercise 2: Parameterized Logging**

**ParameterizedLoggingExample.java**

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

public class ParameterizedLoggingExample {

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

public static void main(String[] args) {

String username = "Ashish";

int age = 25;

logger.info("User {} has logged in", username);

logger.debug("User {} is {} years old", username, age);

}

}

**Console Output:**

14:30:21.125 [main] INFO ParameterizedLoggingExample - User Ashish has logged in

14:30:21.126 [main] DEBUG ParameterizedLoggingExample - User Ashish is 25 years old

**Exercise 3: Using Different Appenders**

**AppenderLoggingExample.java**

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

public class AppenderLoggingExample {

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

public static void main(String[] args) {

logger.info("Logging to console and file");

logger.warn("This warning will appear in both");

logger.error("This is a critical error logged to both outputs");

}

}

**Console Output:**

14:30:21.127 [main] INFO AppenderLoggingExample - Logging to console and file

14:30:21.128 [main] WARN AppenderLoggingExample - This warning will appear in both

14:30:21.129 [main] ERROR AppenderLoggingExample - This is a critical error logged to both