**Exercise 1: Implementing the Singleton Pattern**

**Program:**

Logger.java:

package com.singleton;

public class Logger {

private static Logger *instance*;

private Logger() {

System.***out***.println("Instance created.");

}

public static Logger getInstance() {

if (*instance*==null) {

*instance*=new Logger();

}

return *instance*;

}

public void log(String msg) {

System.***out***.println("Log: "+msg);

}

}

Test.java:

package com.singleton;

public class Main {

public static void main(String[] args) {

Logger log1 = Logger.*getInstance*();

log1.log("Starting...");

Logger log2 = Logger.*getInstance*();

log2.log("Performing operations...");

if (log1==log2) {

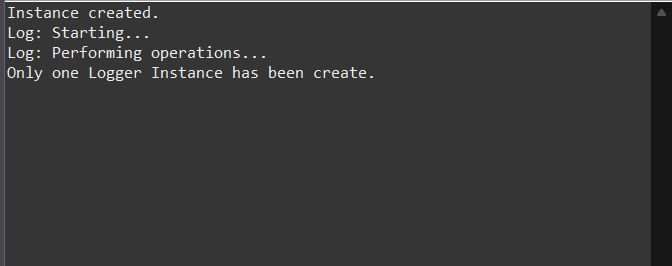
System.***out***.println("Only one Logger Instance has been create.");

}

}

}

**Output:**

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