**Logger.java :**

public class Logger {

private static Logger instance;

private Logger() {

System.out.println("Logger initialized.");

}

public static Logger getInstance() {

if (instance==null) {

instance=new Logger();

}

return instance;

}

public void log(String message) {

System.out.println("Log: "+message);

}

}

**LoggerTest.java :**

public class LoggerTest {

public static void main(String[] args) {

Logger logger1 = Logger.getInstance();

Logger logger2 = Logger.getInstance();

logger1.log("First instance");

logger2.log("Second instance");

if (logger1==logger2) {

System.out.println("Both are the same.Singleton works!");

}else {

System.out.println("They are different.Singleton failed!");

}

}

}

**Output :**

