using System;

public class Logger

{

private static readonly Logger instance = new Logger();

private Logger()

{

Console.WriteLine("Logger initialized.");

}

public static Logger GetInstance()

{

return instance;

}

public void Log(string message)

{

Console.WriteLine("Log: " + message);

}

}

public class Program

{

public static void Main(string[] args)

{

Logger logger1 = Logger.GetInstance();

logger1.Log("User logged in successfully");

Logger logger2 = Logger.GetInstance();

logger2.Log("User performed a transaction");

if (object.ReferenceEquals(logger1, logger2))

{

Console.WriteLine("Both logger instances are the same (Singleton verified).");

}

else

{

Console.WriteLine("Logger instances are different (Singleton failed).");

}

}

