**Exercise 1: Implementing the Singleton Pattern**

**Scenario:**

You need to ensure that a logging utility class in your application has only one instance throughout the application lifecycle to ensure consistent logging.

**Steps:**

1. **Create a New Java Project:**

A new Java project named **SingletonPatternExample** is created. The implementation is provided in the wordpad.

1. **Define a Singleton Class:**

* A class named Logger has created with a private static instance of itself.
* Ensured that the constructor of Logger is private.
* Provided a public static method to get the instance of the Logger class.

1. **Implement the Singleton Pattern:**

* The code is written code to ensure that the Logger class follows the Singleton design pattern and the code is provided in the wordpad.

1. **Test the Singleton Implementation:**

* A test class is created to verify that only one instance of Logger is created and used across the application.