Theory Answers & Outputs

Design principles & Patterns

Exercise 1: Singleton Pattern

The Singleton Pattern ensures that only one instance of a class is created and provides a global point of access to it. It is achieved by using a private static instance, a private constructor, and a public static method to get the instance. This is useful for shared resources like logging, configuration, or database connections.

OUTPUT

```
PS C:\Users\KIIT\Downloads\CSharp_DesignPatterns_Exercises (1)\6364375_week1\SingletonPatternExample> dotnet run
>>>
Logger instance created.
Log: First log message.
Log: Second log message.
Are both loggers the same instance? True
>>> PS C:\Users\KIIT\Downloads\CSharp_DesignPatterns_Exercises (1)\6364375_week1\SingletonPatternExample>
```