

Theory Answers & Output

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 D:\COGNIZANT\6364376_Week-1\SingletonPatternExample> dotnet run
Logger instance created.
Log: First log message.
Log: Second log message.
Are both loggers the same instance? True
○ PS D:\COGNIZANT\6364376_Week-1\SingletonPatternExample> █
```