**Exercise 1: Implementing the Singleton Pattern**

**CODE :**

class Logger {

    private static Logger instance;

    private Logger() {}

    public static Logger getInstance() {

        if (instance == null) {

            instance = new Logger();

        }

        return instance;

    }

    public void log(String *message*) {

        System.out.println("[LOG]: " + message);

    }

}

public class SingletonPatternExample {

    public static void main(String[] *args*) {

        Logger s1 = Logger.getInstance();

        Logger s2 = Logger.getInstance();

        s1.log("Testing singleton...");

        if (s1 == s2) {

            System.out.println("Singleton Pattern Tested Successfully");

        } else {

            System.out.println("Not same object");

        }

    }

}

