**Exercise 1: Implementing the Singleton Pattern**

Code :

public class Singleton {

private Singleton() {}

private static class Holder {

private static final Singleton INSTANCE = new Singleton();

}

public static Singleton getInstance() {

return Holder.INSTANCE;

}

public void showMessage() {

System.out.println("Hello from Singleton!");

}

public static void main(String[] args) {

Singleton s1 = Singleton.getInstance();

Singleton s2 = Singleton.getInstance();

s1.showMessage();

System.out.println("Are both instances the same? " + (s1 == s2));

}

}

Input :

A computer screen shot of a program

AI-generated content may be incorrect.

Output :

A screenshot of a computer

AI-generated content may be incorrect.