**Exercise 1: Implementing the Singleton Pattern**

**Source code:**

**Logger.java :**

//LAZY INITIALIZATION

class Logger{

private static Logger instance;

private Logger(){

System.out.println("Single instance class ");

}

public static Logger getInstance(){

if(instance == null){

instance = new Logger();

}

return instance;

}

}

**Main.java :**

public class Main {

public static void main(String[] args) {

Logger instance1 = Logger.getInstance();

Logger instance2 = Logger.getInstance();

if(instance2 == instance1){

System.out.println("instance1 address = "+instance2.hashCode());

System.out.println("instance2 address = "+instance1.hashCode());

System.out.println("Same Address");

}

}

}

**OUTPUT SCREENSHOT:**

