Lab 6

Part I

Read, understand, and summarize lock II and related materials in Lecture 6.

Put it as part of your Report I. Make use of lab to get feedback.

Part II Add concurrency control to static variable

Code is given as Week 6 lab code.

(1) How can you put concurrency control to static variable i of class Another using **synchronized(ClassName.class)** ? Test your output.

(2) How can you put concurrency control to to static variable i of class Another using **static ReentrantLock lock**? Test your output.

Part III Consider the following questions

1. What is a race condition?

2. How can we protect against race conditions?

3. Can locks be implemented by simply reading and writing to a binary variable in memory?

4. Why is it better to block rather than spin on a uniprocessor?

6. Why is it sometimes better to spin rather than block on a multiprocessor?