

For the **Lab Session 5**

Lab 7 exercises:

App1 : Using *Semaphore* class and *CyclicBarrier* for T8

App2: Using *ReentrantLock* class and *CountDownLatch* for T8

What is the difference between the *CyclicBarrier* and *CountDownLatch* in execution? What did you observe?

App3: The *wait()/notify()* methods will be used for T6-P6-T7 and T6-P10-T12 synchronizations. The final synchronization from T11 will be implemented using the *CountDownLatch* class.

For *CountDownLatch* examples see:

<https://docs.oracle.com/javase/8/docs/api/index.html?java/util/concurrent/CountDownLatch.html>

Note: Don't forget to draw the statemachine and sequence diagrams for Apps (1,2, and 3).

App5: Draw the Petri-Net diagram for the provided statemachine diagram using a Petri Net drawing tool (you can use *PetriPipe* in Tools folder)
