

Semaphore Exercises

Semaphore

- Briefly describe the semaphore data structure

Simple Semaphore Implementation

- Write a simple implementation of a semaphore
 - You may use a mutex and a condition variable in your class
- Write a program to test your implementation

Binary Semaphore as Mutex

- What is a binary semaphore?
- Describe how a binary semaphore can be used as a mutex

Binary Semaphore as Condition Variable

- Describe how a binary semaphore can be used as a condition variable
- How can we notify more than one thread?

Semaphores

- What are the advantages of semaphores?