CST 334: Operating Systems

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# pthreads cheat sheet

Here are the basic operations on locks and condition variables:

## Locks

To declare a lock: pthread\_mutex\_t lock;

To initialize a lock: pthread\_mutex\_init(&lock, NULL);

To acquire a lock: pthread\_mutex\_lock(&lock);

To release a lock: pthread\_mutex\_unlock(&lock);

## **Condition variables**

To declare a condition variable: pthread\_cond\_t cv;

To initialize a condition variable: pthread\_cond\_init(&cv, NULL);

To wait on a condition variable: pthread\_cond\_wait(&cv, &lock);

To signal a condition variable: pthread\_cond\_signal(&cv);

To broadcast to a condition variable: pthread\_cond\_broadcast(&cv);