What is a critical section?

What is a mutex?

What are the two ways to create a mutex?

How do you lock and unlock a mutex?

When can you destroy a mutex and what is undefined behavior?

What is a counting semaphore?

What do post and wait do?

How would you make a semaphore behave like a mutex?

Can you use it in a signal handler?

How do you create a semaphore and destroy it?

(if there's time) How would use a semaphore to be able to printf when a signal is handled?