

Spinlock implementation

Spin lock:

I first move value 1 to register ebx. One because for my implementation it means that the lock is acquired. Then the value of mutex is always stored on rdi, so every time a thread wishes to acquire the lock to access the critical section it has keep looping until the lock is released by another thread and acquired by the current one. To make sure the lock is acquired I use lock cmpxchgl %ebx, %rdi, this makes sure rdi is one, thus the lock is acquired.

Spin unlock:

To unlock I simply move zero into rdi and return.