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CS 475
Project 3

1. I ran this on my mid-2012 MacBook Pro
2. I used MacOS Catalina
3. I used Clang as my compiler
4. Code

```
void
PushAll( )
{
    if (USE_MUTEX) {
        omp_set_lock(&Lock);
    }

    for( int i = 0; i < NUMN; i++ )
    {
        Push( i );
    }

    if (USE_MUTEX) {
        omp_unset_lock(&Lock);
    }
}

void
PopAll( )
{
    if (USE_MUTEX) {
        omp_set_lock(&Lock);
    }

    for( int i = 0; i < NUMN; i++ )
    {
        int n = Pop( );
    }

    if (USE_MUTEX) {
        omp_unset_lock(&Lock);
    }
}
```

```
}  
int  
main( int argc, char *argv[ ] )  
{  
  
...  
    // Initialize lock  
    omp_init_lock(&Lock);  
...  
}
```

5.

- a. I saw like 1 out of 35+ tries that it worked the non-mutex way.
- b. I would say so. I changed my NUMN to 1000000 and when using non-mutex, the first one had over 52k errors and took 48316689.97 micro seconds (very long)
- c. Yes there appears to be. When using Mutex, all the times are fairly consistent and close. When using non-mutex, times take long, but some complete quickly.