Measure system call:

Detail code, please check the file: 'measure_system_call.c'
Based on the experiment, the average cost for the system call is around 0.163714
microseconds.

Measure context switch:

Detail code, please check the file 'measure_context_switch.c'. Since it is really hard to simulate once core CPU environment in MacOS to measure context switch. Thus, I use virtual machine to simulate one core CPU. Base on my experiment the context switch speed is 2.516560 microseconds.