## PROJECT TOPIC

When programming for multiprocessor/multithread computers, it is necessary to implement locking systems to prevent from overwriting variables. During our class we have already experienced multiple different locking mechanisms. We see that there are many ways to provide security for objects in our programming.

We plan to write and test multiple locking systems to discover where some locks perform well and where others do not. We will be testing how they perform over the number of cores available, the amount of memory the system has, the number of threads being used, etc. These statistics will allow us to determine which locks we should use when, and to help us better understand locking systems.