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### Project Report

#### Team:

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#### References:

##### Granuke and Thakkar's lock

Graunke, Gary, and Shreekanth Thakkar. "Synchronization algorithms for shared-memory multiprocessors." *Computer* 23.6 (1990): 60-69.

##### M Lock

Magnusson, Peter, Anders Landin, and Erik Hagersten. "Queue locks on cache coherent multiprocessors." *Proceedings of 8th International Parallel Processing Symposium*. IEEE, 1994.

##### Multi resource lock

Zhang, Deli, Brendan Lynch, and Damian Dechev. "Fast and scalable queue-based resource allocation lock on shared-memory multiprocessors." *International Conference On Principles Of Distributed Systems*. Springer, Cham, 2013.

#### GT Lock:

The GT Lock gives a classic queue-based lock where each thread waits on it's previous node in the queue. Each node just gets the id of the tail of the queue and spins on it till it is flipped. The id of the process that last tried to acquire lock is also recorded in the lock. Each thread has a different meaning(or representation) for what means locked.