Parallel Computing - Project 3

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Bugs for StripedCuckooHashSet in Book

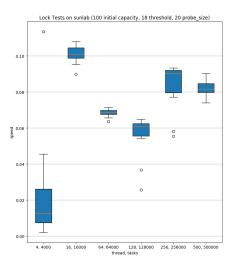
1. Resize function could be done for multiple times. Solution: Save the old capacity before add release the lock and check with the current capacity before resize.

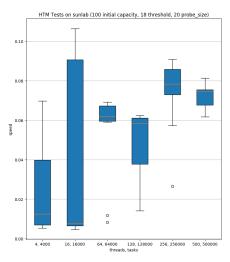
2. Relocate could be interrupted by resize, which could cause segmentation fault or dead lock.

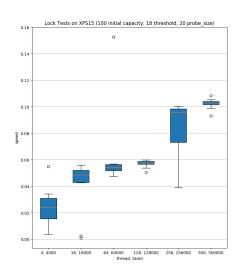
Solution: Check capacity with old capacity once relocate get the lock.

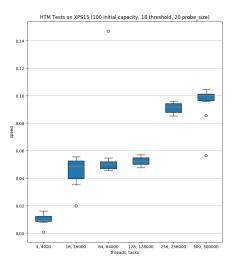
- 3. Adds inside resize function should not acquire locks.
- 4. If add must call resize, it should retry add after resize and return the result.

Tests of Threads Number and Tasks Number

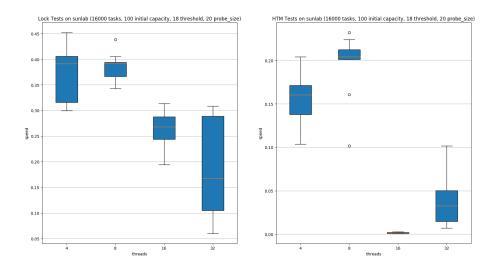




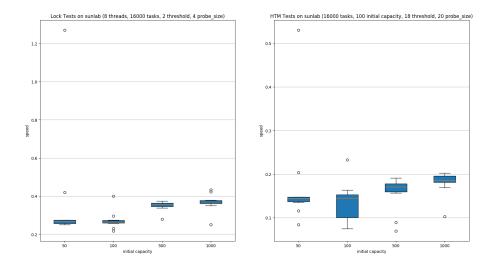




Tests of Threads Number



Tests of Initial Capacity



Tests of Threshold and Probe Size

