

Report List-based sets

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Introduction

Hand-over-Hand algorithm

Correctness of Hand-over-Hand algorithm

[] Argue that both safety and liveness hold

Performance analysis

For the performance analysis, prepare a graph depicting the throughput as a function of the number of threads for the three algorithms, for some representative list size and update ratio. You may use gnuplot or any other plotting program of your choice. Then, for each algorithm, fix the update ratio to 10%, and prepare a graph depicting the throughput as the function of the number of threads, varying the list size. Finally, for each algorithm, prepare a graph depicting the throughput as the function of the number of threads, varying the update ratio, for the list size 1k. Altogether, this gives:

- [] Three plots (one per algorithm), with three curves each, for a fixed update ratio 10% and varying list size.
- [] Three plots (one per algorithm), with three curves each, for a fixed list size 100 and varying update ratios.
- [] One plot, with three curves (one per algorithm), with fixed update ratio 10% and list size 1000.
- [] Explain the forms of the curves and their relations to each other.

Conclusions

Bibliography