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CSE 6140

Homework 2: Real-World Algorithm Performance

Timing methodology:

I used Java’s *currentTimeMillis()* function to get the current system time before, and after a given run. I averaged these times over 5 identical runs to diminish any anomalies from heavily impacting the results.

i7 920 with an L1 cache of 32K, an L2 cache of 256K, and a shared L3 cache of 8M.

I believe this shows that the RAM model does not hold true. If it did, the access time for each element should be the same. Instead, sequential reads seem to have similar access times, but any random reads increase rapidly per each additional element.