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CSC-332

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Factor Finding Threads Data

Execution Time vs # Threads

	1	2	3	4	8	16	32	100000	1000000
Execution time (ms)	8701	4492	2966	2240	2227	2254	2231	5914	54950
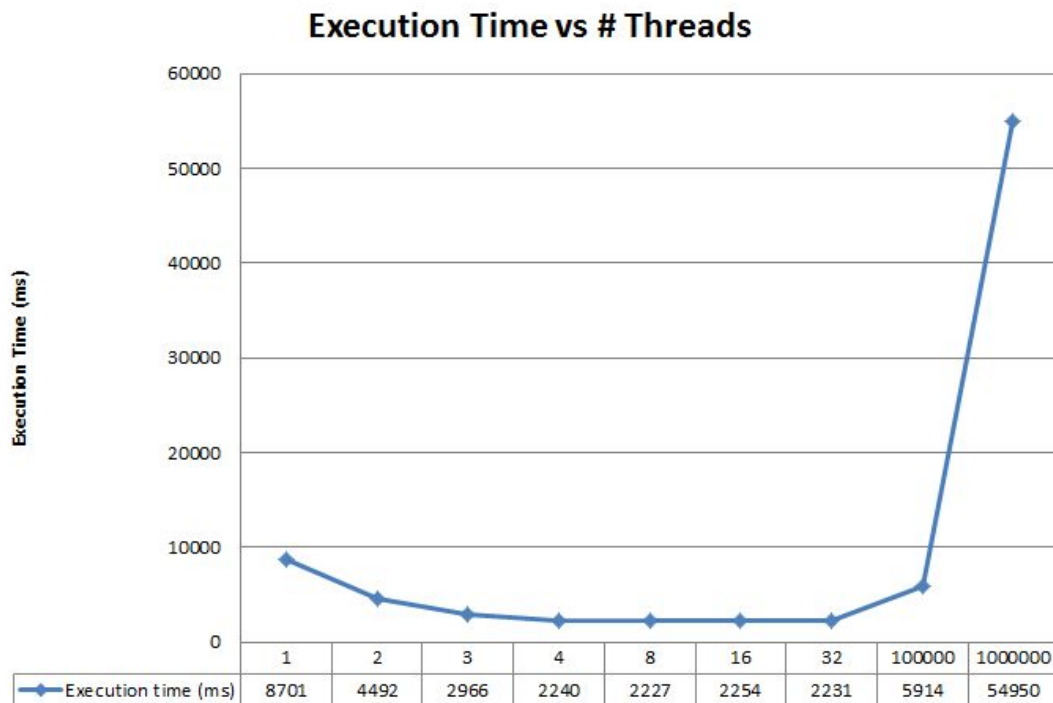
As expected, execution times dropped from 1 thread to 4, and stayed relatively stagnant

from 4 to 32. This is because the lab PCs have 4 cores, so once you approach anything higher

than 4 it your threads will not be able to utilize other cores in parallel. Imagine it like a hallway;

in this case, 4 people can comfortably and efficiently do their work in this hallway. As you start

to pile more people into the hallway their work gets much harder and time-consuming. This is

why 100K and 1M threads take much longer to execute. In reality, 100K and 1M threads take

much longer because there is a lot more overhead due to context switching.