Entrega Lab3

Leonardo Lima Santos

123245484

Array 10k

1 Thread

Run	Thread 1 Result	Sequential Time (s)	Concurrent Time (s)	Variation
1	2509.793701	0.000027	0.000280	0.000000
2	2491.066895	0.000035	0.000224	0.000000
3	2548.272949	0.000027	0.000193	0.000000
4	2534.502930	0.000034	0.000239	0.000000
5	2504.665527	0.000035	0.000226	0.000000

2 Threads

Run	Thread 1 Result	Thread 2 Result	Sequential Time (s)	Concurrent Time (s)	Concurrent Result	Variation
1	1255.519653	1254.277832	0.000028	0.000272	2509.797363	0.000001
2	1259.859741	1231.210327	0.000034	0.000204	2491.070068	0.000001
3	1269.656738	1278.614868	0.000028	0.000169	2548.271484	-0.000001
4	1279.322632	1255.176025	0.000034	0.000197	2534.498535	-0.000002
5	1275.509888	1229.165283	0.000034	0.000240	2504.675293	0.000004

4 Threads

Run	Thread 1	Thread 2	Thread 3	Thread 4	Sequential Time (s)	Concurrent Time (s)	Concurrent Result	Variation
1	626.818	628.701	634.304	619.973	0.000027	0.000311	2509.796143	0.000001
2	619.317	640.540	618.865	612.346	0.000027	0.000277	2491.067871	0.000000
3	646.967	622.689	638.816	639.802	0.000034	0.000207	2548.274902	0.000001
4	630.719	648.604	633.026	622.153	0.000027	0.000223	2534.502441	-0.000000
5	633.998	641.511	605.049	624.114	0.000027	0.000186	2504.672852	0.000003

Array 100k

1 Thread

Run	Thread 1 Result	Sequential Time (s)	Concurrent Time (s)	Variation
1	25096.912109	0.000273	0.000566	0.000000
2	24949.355469	0.000281	0.000539	0.000000
3	24957.695312	0.000276	0.000430	0.000000
4	25012.070312	0.000273	0.000433	0.000000
5	25012.070312	0.000296	0.000527	0.000000

2 Threads

Run	Thread 1 Result	Thread 2 Result	Sequential Time (s)	Concurrent Time (s)	Concurrent Result	Variation
1	12583.037109	12513.860352	0.000273	0.000487	25096.898438	-0.000001
2	12443.932617	12505.590820	0.000274	0.000387	24949.523438	0.000007
3	12519.959961	12437.717773	0.000276	0.000316	24957.677734	-0.000001
4	12529.203125	12483.052734	0.000273	0.000309	25012.255859	0.000007
5	12529.203125	12483.052734	0.000273	0.000310	25012.255859	0.000007

4 Threads

Run	Thread 1	Thread 2	Thread 3	Thread 4	Sequential Time (s)	Concurrent Time (s)	Concurrent Result	Variation
1	6315.804	6267.186	6225.816	6287.994	0.000278	0.000323	25096.800781	-0.000004
2	6174.063	6269.849	6302.206	6203.374	0.000279	0.000267	24949.492188	0.000005
3	6274.680	6245.320	6251.405	6186.351	0.000274	0.000352	24957.753906	0.000002
4	6256.620	6272.545	6252.573	6230.501	0.000274	0.000254	25012.238281	0.000007
5	6256.620	6272.545	6252.573	6230.501	0.000273	0.000292	25012.238281	0.000007

Array 1M

1 Thread

Run	Thread 1 Result	Sequential Time (s)	Concurrent Time (s)	Variation
1	249734.593750	0.002986	0.003296	0.000000
2	249734.593750	0.002993	0.003288	0.000000
3	249741.656250	0.002847	0.003083	0.000000
4	250209.281250	0.002748	0.003517	0.000000
5	249640.125000	0.002965	0.003258	0.000000

2 Threads

Run	Thread 1 Result	Thread 2 Result	Sequential Time (s)	Concurrent Time (s)	Concurrent Result	Variation
1	124858.421875	124899.773438	0.002969	0.001807	249758.187500	0.000094
2	124858.421875	124899.773438	0.002945	0.001845	249758.187500	0.000094
3	124880.781250	124887.773438	0.002741	0.001627	249768.562500	0.000108
4	125013.015625	125221.328125	0.002936	0.001728	250234.343750	0.000100
5	124788.343750	124885.203125	0.002941	0.001706	249673.546875	0.000134

4 Threads

Run	Thread 1	Thread 2	Thread 3	Thread 4	Sequential Time (s)	Concurrent Time (s)	Concurrent Result	Variation
1	62443.305	62419.641	62406.973	62496.496	0.002753	0.001161	249766.421875	0.000127
2	62443.305	62419.641	62406.973	62496.496	0.003218	0.001183	249766.421875	0.000127
3	62425.215	62459.875	62537.809	62353.082	0.003035	0.001066	249775.984375	0.000137
4	62511.398	62501.816	62767.762	62458.965	0.002738	0.001164	250239.953125	0.000123
5	62306.816	62485.055	62495.078	62391.320	0.002811	0.001220	249678.281250	0.000153