

## Entrega Lab3

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## 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

### 6 Threads

Run	Thread 1	Thread 2	Thread 3	Thread 4	Thread 5	Thread 6	Sequential Time (s)	Concurrent Time (s)	Concurrent Result	Variation
1	421.757	421.176	412.013	418.721	413.038	423.092	0.000034	0.000271	2509.796143	0.000001
2	414.461	414.772	429.961	417.203	400.913	413.758	0.000028	0.000276	2491.068359	0.000001
3	423.936	425.582	419.934	428.890	415.378	434.554	0.000027	0.000256	2548.274170	0.000000
4	416.076	429.998	431.929	419.948	433.655	402.896	0.000027	0.000238	2534.502686	-0.000000
5	419.753	428.511	426.515	397.168	419.134	413.592	0.000028	0.000244	2504.673584	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

### 6 Threads

Run	Thread 1	Thread 2	Thread 3	Thread 4	Thread 5	Thread 6	Sequential Time (s)	Concurrent Time (s)	Concurrent Result	Variation
1	4233.827	4177.517	4170.766	4186.375	4122.801	4205.544	0.000274	0.000368	25096.828125	-0.000003
2	4117.765	4122.017	4203.738	4233.135	4133.541	4139.331	0.000273	0.000307	24949.527344	0.000007
3	4173.827	4196.398	4149.520	4174.898	4142.441	4120.637	0.000346	0.000365	24957.720703	0.000001
4	4182.130	4175.431	4171.151	4169.365	4176.669	4137.446	0.000346	0.000307	25012.191406	0.000005
5	4182.130	4175.431	4171.151	4169.365	4176.669	4137.446	0.000273	0.000335	25012.191406	0.000005

## 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

### 6 Threads

Run	Thread 1	Thread 2	Thread 3	Thread 4	Thread 5	Thread 6	Sequential Time (s)	Concurrent Time (s)	Concurrent Result	Variation
1	41635.223	41592.055	41634.992	41623.957	41611.293	41670.336	0.002769	0.000852	249767.875000	0.000133
2	41635.223	41592.055	41634.992	41623.957	41611.293	41670.336	0.002832	0.000881	249767.875000	0.000133
3	41675.309	41573.453	41635.980	41629.469	41779.375	41483.180	0.002752	0.000810	249776.781250	0.000141
4	41650.395	41621.734	41741.074	41772.910	41870.387	41583.633	0.002795	0.000840	250240.125000	0.000123
5	41510.672	41653.312	41628.391	41704.855	41579.625	41602.969	0.002765	0.000839	249679.828125	0.000159