

Entrega Nro. 2

Programación con memoria compartida

Alumnos:

- Aparicio Natalia Elizabeth - 12667/7
- Eusebi Cirano - 12469/2

Ejercicio 1

OpenMP

N	Secuencial	2 THREADS	4 THREADS
512	1.9203	1.0133	0.5615
1024	15.5681	8.3661	4,5790
2048	126,1329	66,7107	37,0839

Speed Up

N	2 THREADS	4 THREADS
512	1,8951	3,4198
1024	1,8608	3,3998
2048	1,8907	3,4012

Eficiencia

N	2 THREADS	4 THREADS
512	0,9475	0,8549
1024	0,9304	0,8499
2048	0,9453	0,8503

PThread

N	Secuencial	2 THREADS	4 THREADS
512	1.9203	1.0094	0.5382
1024	15.5681	7.8027	4.2264

2048	126.1329	61.3400	32.5148
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Speed Up

N	2 THREADS	4 THREADS
512	1.9023	3.5678
1024	1.9952	3.6835
2048	2.0562	3.8692

Eficiencia

N	2 THREADS	4 THREADS
512	0.9511	0.8919
1024	0.9976	0.9208
2048	1.0281	0.9698

Ejercicio 2

N	Sequencial	2 THREADS	4 THREADS
2^25	6.778	3.753	2.159
2^26	13.786	7.608	4.353
2^27	28.568	15.923	8.989

Speed Up

N	Sequencial	2 THREADS	4 THREADS
2^25	1	1.806	3.139
2^26	1	1.812	3.167
2^27	1	1.794	3.178

Eficiencia

N	Sequencial	2 THREADS	4 THREADS
2^25	1	0.903	0.784
2^26	1	0.906	0.791
2^27	1	0.897	0.794

Ejercicio 2 Reentrega

N	Sequential	2 THREADS	4 THREADS
2^25	6.889977	3.697697	2.324992
2^26	14.698010	7.727129	4.747451
2^27	29.634855	15.699277	9.453237

Speed Up

N	Sequential	2 THREADS	4 THREADS
2^25	1	1.86331	2.96344
2^26	1	1.90213	3.09597
2^27	1	1.88765	3.13488

Eficiencia

N	Sequential	2 THREADS	4 THREADS
2^25	1	0.93165	0.74086
2^26	1	0.95106	0.77399
2^27	1	0.94382	0.78372

Ejercicio 3

N	Sequential	2 THREADS	4 THREADS
2^12	0.0565	0.0616	0.0344
2^13	0.2543	0.2562	0.1389
2^14	1.1361	1.2134	0.7158

Speed Up

N	Sequential	2 THREADS	4 THREADS
2^12	1	0.9172	1.6424
2^13	1	0.9925	1.8308
2^14	1	0.9362	1.5871

Eficiencia

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N	Sequential	2 THREADS	4 THREADS
2^12	1	0.4586	0.4106
2^13	1	0.4962	0.4577
2^14	1	0.4681	0.3979

Ejercicio 3 Reentrega

N	Sequential Backwards	2 THREADS Dynamic 1 Backwards	2 THREADS Dynamic 1 Forward	2 THREADS Guided Forward	4 THREADS Dynamic 1 Backwards	4 THREADS Dynamic 1 Forward
2^12	0.146345	0.101148	0.084957	0.079655	0.045641	0.046350
2^13	0.586539	0.394327	0.331745	0.325103	0.196426	0.196140
2^14	2.598257	1.442356	1.404302	1.447472	0.842029	0.834679

Speed Up

N	Sequential Backwards	2 THREADS Dynamic 1 Backwards	2 THREADS Dynamic 1 Forward	2 THREADS Guided Forward	4 THREADS Dynamic 1 Backwards	4 THREADS Dynamic 1 Forward
2^12	1	1.446840	1.722577	1.837223	3.206437	3.157389
2^13	1	1.487443	1.768041	1.804163	2.986055	2.990499
2^14	1	1.801397	1.850212	1.795030	3.085709	3.112881

Eficiencia

N	Sequential Backwards	2 THREADS Dynamic 1 Backwards	2 THREADS Dynamic 1 Forward	2 THREADS Guided Forward	4 THREADS Dynamic 1 Backwards	4 THREADS Dynamic 1 Forward
2^12	1	0.723420	0.861288	0.918617	0.801609	0.789347
2^13	1	0.743721	0.884020	0.902081	0.746513	0.747602
2^14	1	0.900698	0.925106	0.897515	0.771427	0.778220

Ejercicio 4

N	Sequential	2 THREADS	4 THREADS
2^12	0.0775	0.0300	0.0167

2^25	0.0775	0.0300	0.0167
2^26	0.1528	0.0594	0.0326
2^27	0.3118	0.1138	0.0632

Speed Up

N	Sequential	2 THREADS	4 THREADS
2^25	1	2.5833	4.6407
2^26	1	2.5723	4.6871
2^27	1	2.7398	4.9335

Eficiencia

N	Sequential	2 THREADS	4 THREADS
2^25	1	1.2916	1.1601
2^26	1	1.2861	1.1717
2^27	1	1.3699	1.23335