

Lab 6

Test Number	Data Size	Exec Time (sec)	Iterations	Theoretical time			
1	10	0,000042	44	0,000019			
2	100	0,036781	366	0,023855			
3	1000	2,365144	362	2,446893			
4	2000	9,769337	372	10,078114	$T_1 = kmN^2$		
5	3000	21,589905	364	22,202915			
6	4000	38,514270	362	39,268065			
7	5000	61,620185	367	62,216262			
8	6000	88,521609	364	88,870915			
9	7000	121,639411	366	121,639411			
10	8000	154,026433	355	154,112015			
11	9000	204,179894	369	202,751320			
12	10000	254,892121	373	253,034910			

PC Exec

Data Size	Serial Algorithm	Parallel Algotirhm					
		2 processors		4 processors		8 processors	
		Time	Speed Up	Time	Speed Up	Time	Speed Up
10	0,000042	0,000375	0,11200	0,00287	0,01463	0,004047	0,01038
100	0,036781	0,022942	1,60322	0,012281	2,99495	0,019266	1,90911
1000	2,365144	1,224264	1,93189	0,668827	3,53626	1,188571	1,98991
2000	9,769337	5,105098	1,91364	2,781929	3,51171	4,066991	2,40210
3000	21,589905	11,834246	1,82436	6,352308	3,39875	8,258328	2,61432
4000	38,514270	20,805662	1,85114	12,007686	3,20747	13,652085	2,82113
5000	61,620185	32,151445	1,91656	20,234507	3,04530	20,418437	3,01787
6000	88,521609	49,11897	1,80219	29,525321	2,99816	27,395057	3,23130
7000	121,639411	62,792359	1,93717	39,65606	3,06736	36,664638	3,31762
8000	154,026433	82,74198	1,86153	57,512947	2,67812	46,864019	3,28667
9000	204,179894	106,980872	1,90856	72,948055	2,79898	72,44136	2,81855
10000	254,892121	128,818498	1,97869	81,139217	3,14142	94,796948	2,68882