

Table 1
Execution time and speedup using MPI Implementation

Steps	Max Time				Time	Avg Time			
	Time	Speedup				Speedup	p = 5	p = 10	p = 20
		p = 1	p = 5	p = 10					
5000	2.48	2.98	3.93	6.52	2.09	4.35	5.80	9.50	
10000	10.79	2.84	3.79	6.50	8.96	4.12	5.49	9.43	
20000	46.54	2.82	3.92	6.68	37.65	4.06	5.75	9.70	
40000	94.78	1.36	1.91	3.50	73.90	1.89	2.68	4.64	
60000	220.76	1.56	2.19	3.79	168.59	2.15	3.12	5.30	
80000	394.03	1.53	2.18	3.77	302.15	2.13	3.10	5.33	
100000	795.86	3.88	2.81	4.85	655.78	5.63	4.30	7.95	

Table 2
Execution time and speedup using OpenMP Implementation

Steps	Max Time				Avg Time			
	Time	Speedup			Time	Speedup		
		p = 1	p = 5	p = 10		p = 15	p = 1	p = 5
5000	2.48	1.43	2.66	3.30	2.09	1.99	2.67	3.31
10000	10.79	1.53	3.03	4.15	8.96	1.92	3.24	4.22
20000	46.54	1.86	3.44	4.79	37.65	2.05	3.58	4.92
40000	94.78	1.18	2.07	5.52	73.90	1.20	2.08	5.44
60000	220.76	1.21	2.13	5.71	168.59	1.21	2.15	5.61
80000	394.03	1.20	2.13	5.73	302.15	1.20	2.18	5.33
100000	795.86	1.19	2.09	5.69	655.78	1.21	2.11	5.45