

For this assignment I did 3 batches of tests. I did one test with a chunk size of 100 and compared it with thread number of 1,4 and 16. The second and third with a chunk size of 200 and 500 with the same amount of threads. Comparing all these tables I can see that there are minor speed ups from the 200 and 500. Although some of the highest values were not quite the same, there was still some speed ups .

Thread count: 1	Chunk size: 100	
Argument	High	Time
2000	1276936	2.70E-03
20000	27114424	3.28E-02
200000	17202377752	3.01E-01
2000000	1.56914E+11	3.05E-03
Thread count: 4		
Argument	High	Time
2000	1276936	4.04E-03
20000	27114424	4.41E-02
200000	17202377752	4.44E-01
2000000	1.56914E+11	4.42E+00
Thread count: 16		
Argument	High	Time
2000	354292	9.79E-03
20000	27114424	5.62E-02
200000	17202377752	5.32E-01
2000000	1.56914E+11	6.59E+00

Thread count: 1	Chunk size: 200	
Argument	High	Time
2000	1276936	2.58E-03
20000	27114424	3.81E-02
200000	17202377752	3.45E-01
2000000	1.56914E+11	3.54E+00
Thread count: 4		
Argument	High	Time
2000	1276936	2.90E-03
20000	27114424	3.99E-02
200000	17202377752	3.24E-01
2000000	1.56914E+11	2.97E+00
Thread count: 16		
Argument	High	Time
2000	1276936	5.87E-03
20000	27114424	4.72E-02
200000	17202377752	2.46E-01
2000000	1.56914E+11	6.17E+00

Thread count: 1	Chunk size: 500	
Argument	High	Time
2000	1276936	2.71E-03
20000	27114424	3.61E-02
200000	17202377752	3.25E-01
2000000	1.56914E+11	3.33E+00
Thread count: 4		
Argument	High	Time
2000	1276936	1.60E-03
20000	27114424	3.39E-02
200000	17202377752	2.90E-01
2000000	90239155648	3.59E+00
Thread count: 16		
Argument	High	Time
2000	1276936	3.71E-03
20000	9635920	4.18E-02
200000	17202377752	3.75E-01
2000000	1.56914E+11	5.92E+00