Table 1 N = 10,000

Threads	Time taken	Speedup
1	0.398998	NA
2	0.243815	1.636
5	0.088112	4.527
10	0.056717	7.033
20	0.046980	8.491
100	0.027932	14.28

Table 2 N = 100,000

Threads	Time taken	Speedup
1	41.790624	NA
2	22.138633	1.888
5	8.573802	4.874
10	4.655213	8.977
20	2.443587	17.102
100	0.933565	44.765

#pragma omp critical
result[j] = -1;
This section stalled the threads running in parallel for synchronization purposes. However, it was a necessary block because all the threads depend on each other for any value alterings in this shared resource (the array called 'result').