|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 10 | 100 | 1000 | 10000 | 100000 | 1000000 |
| 1 | 0.62 | 6.78 | 5.44 | 4.09 | 5.07 | 12.14 | 12.56 |
| 2 | 0.3 | 3.15 | 8.72 | 9.2 | 7.96 | 13.77 | 24.23 |
| 4 | 0.32 | 2.55 | 11.26 | 20.41 | 14.71 | 20.6 | 48.76 |
| 8 | 0.19 | 1.43 | 8.85 | 33.12 | 29.94 | 32.85 | 75.68 |
| 16 | 0.1 | 1.01 | 7.67 | 41.17 | 63.25 | 62.41 | 113.38 |
| 32 | 0.06 | 0.75 | 5.65 | 31.36 | 109.03 | 110.53 | 175.05 |

**Estimated Probability**: **6.60%**

**Speedup** = (113.38 / 12.56) = **9.027**

(Performance with sixteen threads) / (Performance with one thread)

**Parallel Fraction**: (16 / (16-1)) \* (1 - (1 / 9.027)) = 0.948