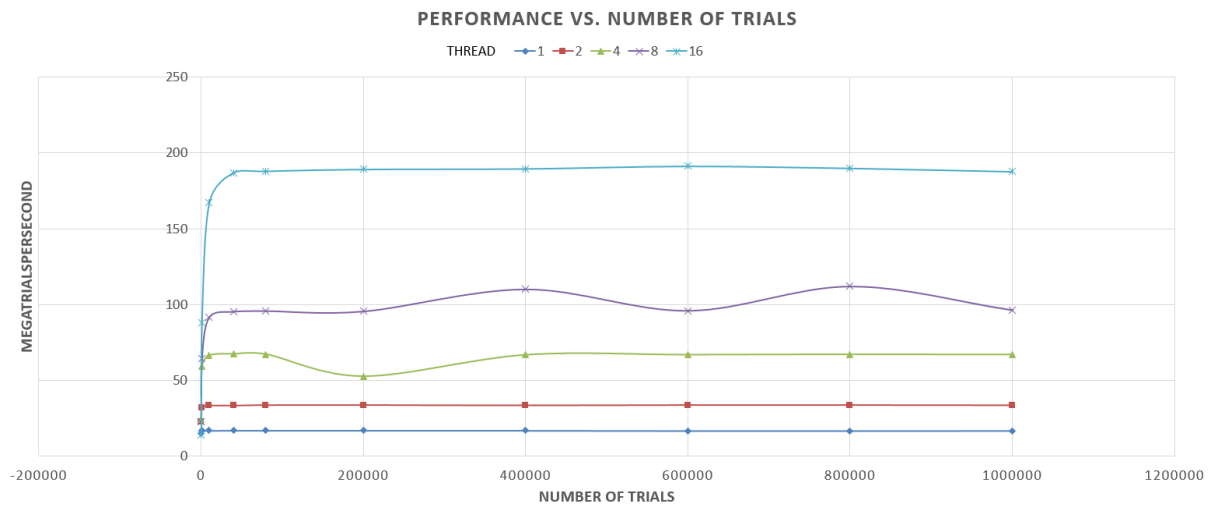# CS 475/575 -- Spring Quarter 2019
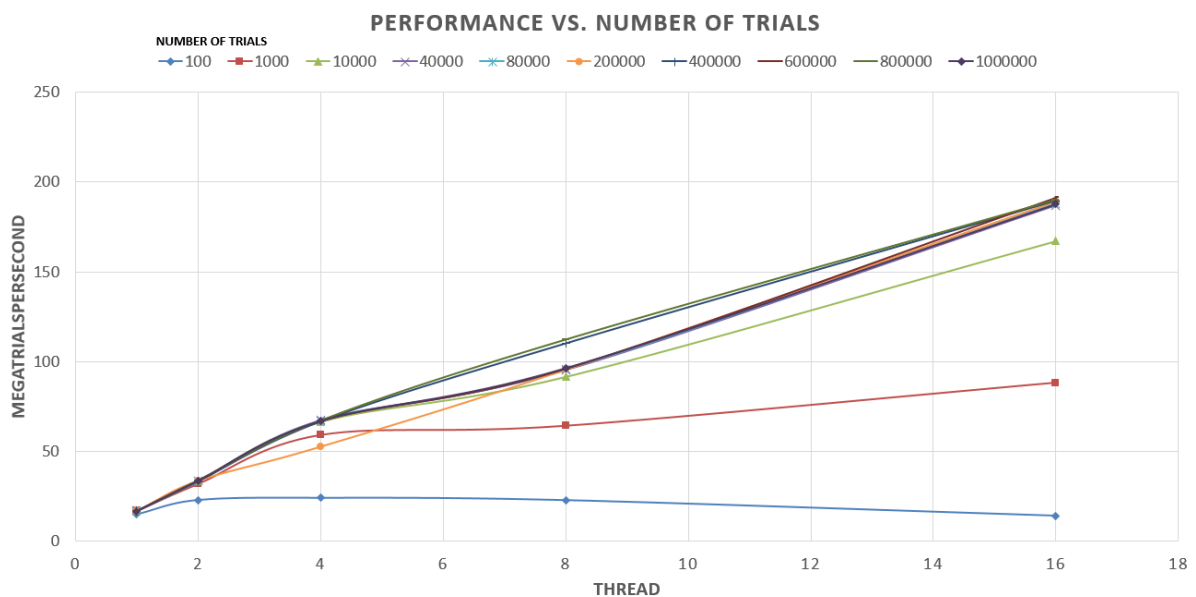
Project #1

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Close estimate of the actual probability: 19.06%

Good graph of performance vs. number of trials:

Good graph of performance vs. number of threads:

Compute Fp, the Parallel Fraction (show your work)	
	1000000trials
1	16.78402
2	33.52333
4	66.94316
8	96.37329
16	187.715

```
Fp = ( NUMT/(NUMT-1) )( 1 - (1/Speedup) )

Speedup for 2, 4, 8, 16 threads

Speedup(2, 1) = 1.9973

Speedup(4, 1) = 3.9885

Speedup(8, 1) = 5.742

Speedup(16, 1) = 11.184

Fp for 2, 4, 8, 16 threads

Fp(2) = 0.9986

Fp(4) = 0.9990

Fp(8) = 0.9438

Fp(16) = 0.9713

Fp(avg) = 0.978175
```