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CS 475 Parallel Programming

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Project #0: Simple OpenMP Experiment

1. Tell what machine you ran this on
 - Flip server
2. What performance results did you get?
 - 1 thread: ~1858.24 MegaMults/sec
 - 4 thread: ~4329.72 MegaMults/sec
3. What was your 4-thread-to-one-thread speedup?
 - $S = 4329.72/1858.24 = \sim 2.33$
4. If the 4-thread-to-one-thread speedup is less than 4.0, why do you think it is this way?
 - I think the reason why the speedup is less than 4.0 is because there is overhead and other sections within the code that are not parallelized and as such, do not contribute to increases in performance as compared to the sections that are parallelized.
5. What was your Parallel Fraction, F_p ?
 - $F_p = (4./3.)*(1.-(1./S)) = \sim 0.761$