CS475_Hamilton_Project0_Qs
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1. **Tell what machine you ran this on**

   MacBook Pro using VS Code

2. **What performance results did you get?**

   For 1 threads, Peak Performance = 250.41 MegaMults/Sec

   For 4 threads, Peak Performance = 699.05 MegaMults/Sec

3. **What was your 1-thread-to-4-thread speedup?**

   Speedup = 2.79

   Averages around 2.5 to 2.8

4. **Your 1-thread-to-4-thread speedup should be less than 4.0. Why do you think it is this way?**

   Well max time it would take would be 4 since in a perfect scenario all threads run at the exact same speed and time, so having 4 threads would make the program run 4x faster in a perfect scenario. However I'm sure there are more processes that take place when creating multiple threads which would add to the runtime making the speedup more likely to be less than 4.

5. **What was your Parallel Fraction, Fp? (Hint: it should be less than 1.0, but not much less.)**

   Parallel Fraction = 0.86

   Averages around 0.8 to 0.9