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Project #0

Simple OpenMP Experiment

```
NUMT = 1
Using 1 threads
Peak Performance = 207.53 MegaMults/Sec
Average Performance = 201.49 MegaMults/Sec
NUMT = 4
Using 4 threads
Peak Performance = 781.72 MegaMults/Sec
Average Performance = 759.02 MegaMults/Sec
```

1. Tell what machine you ran this on

I ran this on my home machine. My CPU is an AMD Ryzen 5 1600. 6 cores 12 threads.

2. What performance results did you get?

Above is a screenshot of my terminal output. I almost got an expected speed up of 4.

3. What was your 4-thread-to-one-thread speedup?

My speedup when comparing either peak or average is 3.77

4. If the 4-thread-to-one-thread speedup is less than 4.0, why do you think it is this way?

I don't know! But if I had to guess, I think it would probably be due to overhead and portions of the program that doesn't utilize OpenMP.

5. What was your Parallel Fraction, Fp?

My Fp was 0.98.