

Project Title: Simple OpenMP Experiment

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I ran my project on the Flip server and got the following result.

```
[flip3 ~/Spring 2023 288$ g++ -o proj proj.cpp -lm -fopenmp
[flip3 ~/Spring 2023 289$ ./proj
OpenMP version 201107 is supported here
For 1 threads, Peak Performance = 252.87 MegaMults/Sec
For 4 threads, Peak Performance = 886.07 MegaMults/Sec
Speedup = 3.50
Parallel Fraction = 0.95
```

Array Size	20384
1 Thread, Peak Performance	252.87
4 Thread, Peak Performance	886.07
Speedup	3.50
Parallel Fraction	0.95

I got the Speedup 3.50 which is less than 4. Ideally, I think it should be 4 as the number of threads increases the speedup should increase proportionally. But the value decreases a little due to factors such as communication overhead and memory contention. And the Parallel Fraction value of 0.95 implies that the program is 95% parallelized.