Travis Robinson
Project 0
Simple OpenMP Experiment
CS475
Spring 2016

Results for One Thread:
Peak: 107.23 MegaMults/Sec
Average: 106.50 MegaMults/Sec

Results for Four Threads:
Peak: 425.86 MegaMults/Sec
Average: 419.29 MegaMults/Sec

Commentary:
For project 0, I used OSUs Flip server, at access.engr.oregonstate.edu. For one thread, I recevied a peak performance of 107.23 MegaMults/Sec with an average of 106.50 MegaMults/Sec. For four threads, I got a peak of 425.86 MegaMults/Sec with an average of 419.29 MegaMults/Sec, so with four threads, the computer is able to process the data roughly four times as quickly.

I believe that I got these results because using four threads, the computer is able to have four concurrent calculations done on the data, as opposed to a single calculation with one thread. This allows the computer to break the data to be manipulated into four sections, and each thread is able to take one to act on. Sort of like painting a house where each person paints one wall. It's unable to fully reach four times the speed though because of the time taken to create the threads and divide the loop up between them.