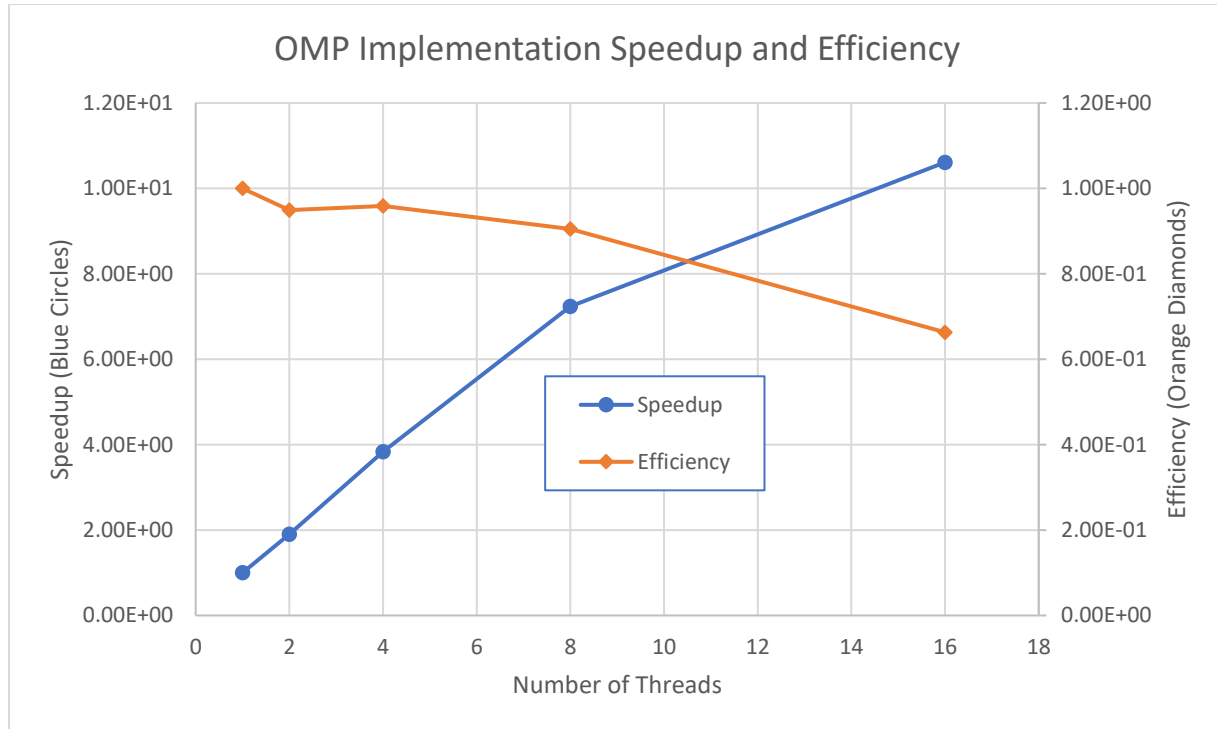


Homework 10 Results Summary

A plot of the speedup and efficiency of the Open MP parallelization of the linear sort algorithm is shown below.



Even with the parallelization, the highest speed was seen with the binary sort. As stated in the Lab 9 report, the binary search takes a max number of $N = \text{Floor}(\log_2(\text{array size})) + 1$ iterations with some overhead. In contrast, increasing the number of parallel workers can only at best decrease the search time by the number of active workers, assuming perfect efficiency.