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The output obtained will not be constant. It depends on processor usage at the given instant and a number of parameters that give varying results. We have tried to negate this by running 100 iterations for each number of threads.

However, there is a trend that is constant amongst all our results for our systems:

The execution is fastest with 2 threads. Beyond this the overhead for thread creation is greater than the speedup obtained from having more threads. After 2 threads, the trend observed is a linear increase in execution time as the number of threads increase.

These results depend on the parameters of the system executed on as well, such as the number of cores and the efficiency of your operating system. More powerful systems may result in a different value for the optimal number of threads.