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ASGN 2

- Repeat the same experiment after you implement multi-threading. Is there any difference in performance? What is the observed speedup?

The observed speedup is about a 8x speedup which is expected because we are running the same processes concurrently.

- What is likely to be the bottleneck in your system? How much concurrency is available in various parts, such as dispatch, worker, logging? Can you increase concurrency in any of these areas and, if so, how?

The bottleneck in this system is logging. Having logging turned on will increase the wait time significantly. There is faster concurrency between dispatch, and worker components rather than logging because my implementation requires threads to wait until another finishes writing into the log_file. I can increase the concurrency in this area by giving each thread a specific location of the log_file to write to and each thread may write concurrently without interfering with each other.

- For this assignment you are logging the entire contents of files. In real life, we would not do that. Why?

As the previous question answers, it is very time consuming to do so and there is more risk for failure.