

## Write up

For testing the code:

I use  $n = 4$  for the testing case: I run couple curl command together to let my multithread handle it. Then I used different number of threads to test as will. Then I found that my program works 80% of time. However, I don't have time to run a full test on the assignment.

1. Unfortunately, my program can't handle the big file read or get for some of the reason. It will through a seg fault.
2. Since my program can't handle the multithread big file put or get. I won't be able to know the difference.
3. The bottle neck of the system is we have to guarantee the network speed. Because, the net cat will close in 2 seconds, if we can't finish read or get in time. The test will fail. All the work thread sharing the same code and can work at the same time. I think there is no way to add more concurrency, because the structure of the program and time decide there is no way to get more concurrency. For example, the log file must know what to write before it write it, and the dispatcher must accept request for the client, so the work thread must wait for the main thread to give it a job, before it can finish anything.