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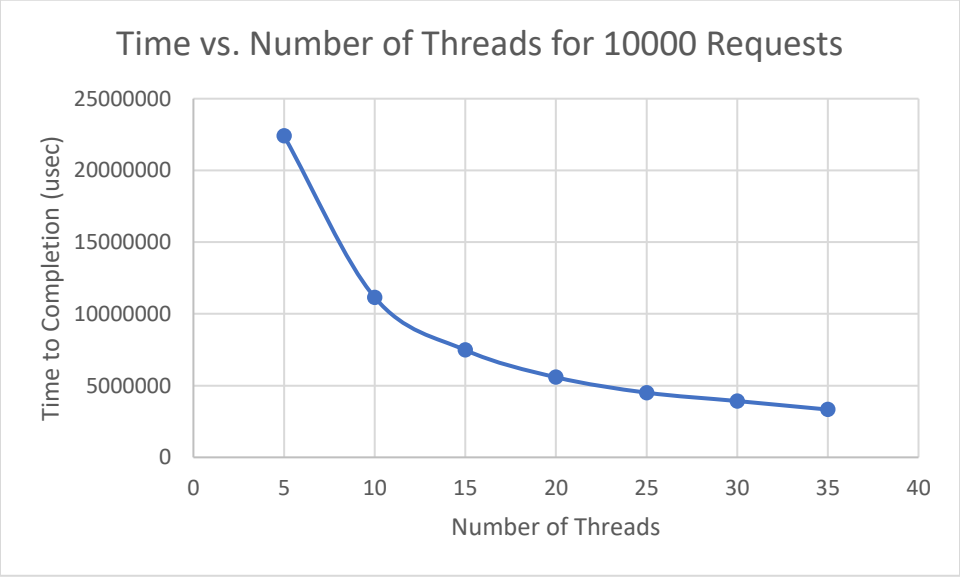
MP4 Report

The original code differs from the new code with the addition of multiple threads for each request. The request and worker thread functions were modified so that each person would be able to send and receive data according to the piped thread that was called. Three threads were created according to each person sending and receiving requests and a set number of worker threads specified by the user were created as well. The threads pushed their data onto the request buffer and proceeded to join together after the quit requests were pushed onto the request buffer as well. Below is a graph made by increasing the number of threads for 10000 requests.



As w increases, the time taken to complete the test decreases. As compared to the code at the beginning of the assignment, the program takes much faster when more threads are used. The point for when the overhead of the threads becomes less efficient than the original code is seen above. Other parameters must be increased to improve performance. I ran the program on the build server on my personal laptop. The threading began to show an error after 35 threads with 10000 requests. In this event a pthread error is thrown and the program exits.