1. The code I implemented differs from the initial code by using multiple threads to populate the request buffer as well as handle the requests from the request buffer. Three threads are created, one for each client and each threads populates the buffer with n requests for its respective client. Then w number of threads are created, each with its own request channel that handles the requests from the buffer and updates the histogram with the responses from the server.
2. The data from the graph is the execution time of w worker threads at 10,000 requests per client. The OS is macOS Mojave on the Macbook Pro 2015, 15in model. With a singular thread (aka original sequential request handling)) the execution time was 130279376 microseconds.
   1. The limit for the OS is 4093 worker threads. The error displayed is “fifo\_data4093\_1: Too many open files”
   2. The OS stagnates the program if it is creating more files than allowed.
   3. The client program doesn’t end but gets stuck because more files cannot be opened but the threads have not “completed” so the program itself can’t reach the end.