PA1 Report

In this lab I learned about FIFO named pipes, Fork and Execvp, and reading and writing to a server. We used requests to read and write data from the server to get access to files held on the servers. We also made new channels to send requests to the server through, including the method of deleting the dynamically allocated servers, including closing the channels properly. We also made a data transfer method, where we are able to transfer any file type using a FIFO named pipe to the server. We implemented a buffer size for the file transfer method, where we transferred an amount of bytes equal to that buffer size through the FIFO named pipe (it might have been a dynamically created new channel), making sure to get the remaining bits after we have less than the buffer size amount of bits remaining. Below is the graph that shows the size of the buffer (aka how many bits we can transfer at one time) to the time it took for the entire 16mb file to transfer from the server to the client. As you can see, the larger the buffer size the less time the request took as a larger buffer size means we use the named pipe less, as using that slows the process down.