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CSS 432

Homework assignment one

Documentation

In this program we looks at the three possible ways to write segments from the buffers. There was write, writev, and multiple writes. The reason writev took a while is due to the fact that it writes the most count segments into the file descriptor. Writev gets data that is going to be written to be stored in several different buffers. The multiple writes was just running multiple processes writing to the same file descriptor like multi-threading, the time complexity was on average the longest of all of the methods. The third test was single write which was the fastest of all of the methods due the fact that the client just needs to write one segment to the server and the server just had to read it.

If this test were to have been on a slower network (like 1 Mbps) there would have been a longer delay for all write functions due to the physical limitations between nodes. There also could have been data loss due to time spent on the wire or noise added to the segments causing corruption.

The reason that you use a thread service over servicing it on the main function is because of the functionality that a thread provides. It contains resources used across the whole program such as program instructions and global data. It also contains information to the execution state (program counter) that allows the thread to know if the data was sent into the stack appropriately.