**Test and describe the behavior of your system when there is a failure of the network.**

I have included error handling to the system when there is a failure of the network. When the network fails, there is a message that is printed to the console informing the user of the client software that the server has failed. The client program is then terminated.

**Experiment and compare the performance of the client/service approach vs. the local memory approach for a test case of your choosing.**

I timed my “happy path” test – included in my submission. This test took 1.06220817566 seconds for the client/service implementation and 0.153266906738 seconds for the local memory implementation.

**Describe the design of your implementation and tests you have conducted to check the functionality of your code.**

No more features were added to the file system in this homework – only changing where the data is stored. Thus, I was able to test with the same testing platform and test cases that I used for the last homework. For the last homework, I enumerated several top layer procedures that I believed could induce edge cases. These test cases included creating files/directories, reading/writing to files, moving files/directories sequenced in different orders. This test platform was ran against the new implementation of the file system and worked flawlessly. I also tested the behavior of the client when the server faults – this was done by stopping the client and cutting the server and then running the client again.