CS 551 Project 1

Submission by Team 7

Sri Sai Ranga Malisetti (A20523038)
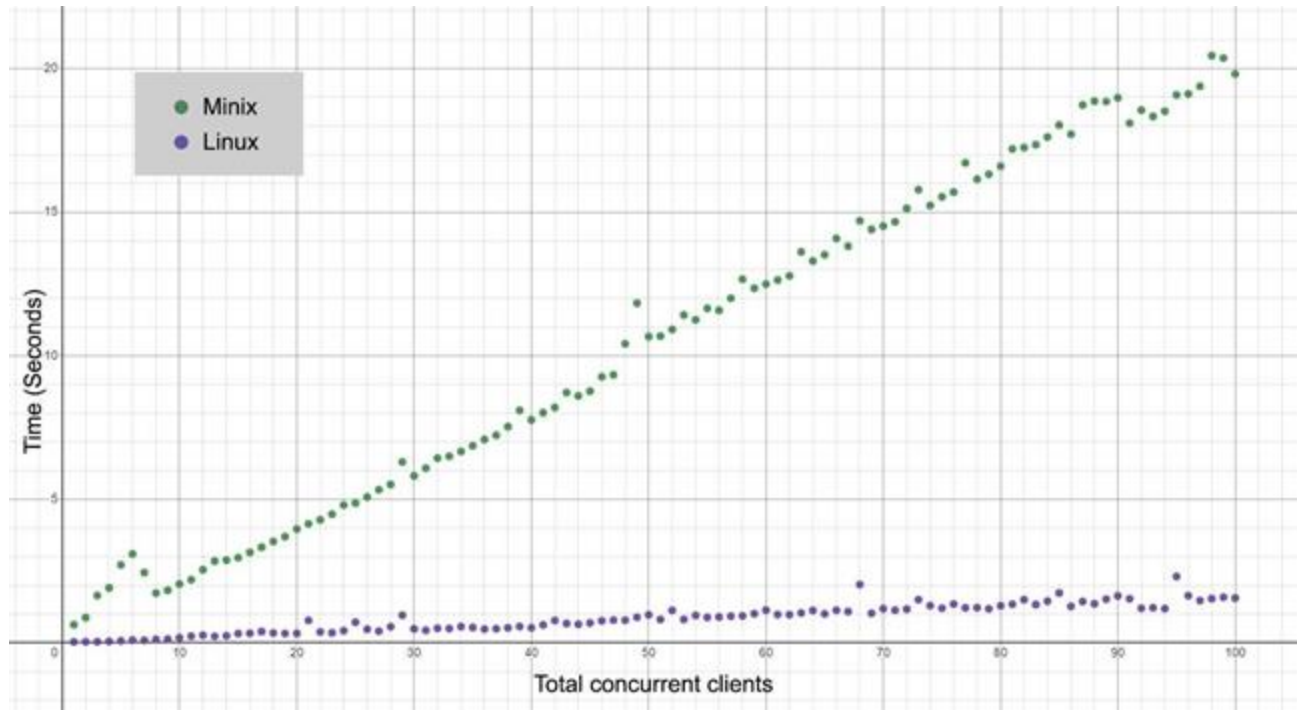Poorna Venkat Neelakantam(A205177752)
Prabhu Avula (A20522815)

Design

For testing the read and write, we designed a function to complete all the basic computations and then the functions were individually run on different threads to test the parallel execution of the read and write operations.

Additionally, out test bench had a bash script to automate the the test execution and collect the data to be analysed later.

The same code has been executed on both the machines to maintain similarities on the results.

Test results

Inference of the results

We notice a large difference in how the read/write operations are executed in linux compared to minix.

It shows how the system call is defined in minix is slowing the operation down, whereas the driver in linux is executing multiple file in parallel and completing the test in a much faster time.

Much more detailed breakup and observations are required to understand and improve minix in comparison with linux.