Noah Silva York University June 27th 2024 EECS 3221

Report 1

1. A general outline of your understanding of the assigned work.

The assigned work was meant to show us the difference between threads and processes even though they are both methods of parallel computing. Not only this but to also show us the intricacies of these ways of better managing work for the processor and memory management. Memory leaks can happen without knowing and this assignment brought this to my attention on a smaller scale. Within the process.c task I was able to understand how to control the amount, lifespan, and communication for processes. Within the thread.c file I understood that threads share memory rather than copy it. Each of these methods of parallel computing has a different overhead. Threads generally have a lower overhead than processes and this was shown within this assignment.

2. A clear statement about the assigned work/components you believe you have done/completed successfully.

I believe I have completed everything successfully other than possibly a way to handle empty files. As of now I have it printing "dataset4 SUM=NONE DIF=NONE MIN=NONE MAX=NONE" if the file is empty, it also does not count for the global min and max.

3. A statement about the work you believe you might have not completed successfully (feel free to comment on related problems, if any).

I may have misunderstood an empty file handler.

4. Anything else related to your work that you might wish to comment upon. I really enjoyed this assignment as a whole! I ended up making a sandbox for more thread and process related activities because of it.