

Programming Assignment 1

For this assignment, I used Raspberry Pi OS (formerly Raspbian) to test and compile my code. I used gcc to compile the code using the command: `gcc jh4411_<name>.c -o <name>`. This project felt like a good starting ground for this class. I did look at this [website](#) to help me code up the `execvp` function for that c file. I also really enjoyed writing the error checking for the `exec` program.

Now to talk about the fork program and how it behaved on the system. As expected, when I just had a for loop in the code that forked on every iteration of the loop, the kernel scheduled the processes in order and displayed them to the screen. They were not in the correct order but that is because it needed to share resources with the rest of the system. The scheduler also seemed to prefer processes that were forked sooner rather than the earlier processes, because I still got a lot of 1's printed out near the end. An interesting behavior I found was when I added a `printf` statement at the end of the program after the for loop. Then the code printed out the counter values in order and terminated like I expected it too, instead of the mess of number above.