## **Project 1 Summary**

Throughout the course of this project, I learned a lot about what goes into creating a shell program. I also learned about functions I had never used before and system calls. I had very few issues setting up the prompt and builtin commands, except for the 'cd' command. Initially I thought about splitting it up into two portions; one for just 'cd' and another for 'cd' but after some thinking and research I realized I could not only use strcmp() like I did for the other commands but I could also use strncmp() in order to consolidate this portion of the code.

The only other portion of this project I had problems with was the background process part. This part of the project took some time to figure out but after doing some research on execvp(), waitpid(), and perror() I was able to get the rest of the project finished up with minimal errors. Overall, I learned a lot from this project and I didn't find it to be insanely difficult, but it was definitely a challenge.