

## Summary:

Throughout this project I learned about how to read commands from a command line, as well as, parse the existing information to be able to identify commands. This includes using specific pointing parameters along with a buffer size to identify if the command is valid (or not NULL) and then use that information to use build-in. When any built-in command is identified and used in a process that is redirected to system commands when spawning a child to execute said command. The easiest, but also most difficult in this project was the built-in commands. When creating the code I had a rough idea of what I planned to do, however, even though all other functions work properly, the built in function would always have a segmentation fault. Creating each built-in command was pretty easy and didn't require much thought. The system commands weren't terribly complicated, but took a little time trying to figure out `execvp` and `perror`. Overall, this project taught me a lot about how c works and the rigorous debugging that goes into it.