

Description: This program consisted of making your own Y86 emulator and running a given program file.

Design: This project is extremely time consuming when starting out. However, as you start getting a rhythm to how things work and where they should go it doesn't seem as bad in hindsight. First thing was to tokenize the given programs. After everything in the file has been tokenized, the program is executed starting with the instruction at the given index. I deciphered the program files' instructions before actually coding them so that I can start running program 1 faster. After running it successfully I worked on program 2. Program 2 is a factorial program that outputs out the factorial of a given input using call and jumps. There were many difficulties throughout the program including trying to get to the HLT state in program 2 which unfortunately I couldn't get around to fixing that bug. Overall I'd say this program is a real eye opener to the intricacies of a basic instruction set and it was a pleasurable experience when I knew what I was doing.