

Autonomous editor

After we finished working on the autonomous revisions, we decided that we needed to develop an editor to modify and view our new routine files. To accomplish this multiple languages were tried out, and eventually the C programming language was decided on. We would make a terminal based editor that used commands instead of keystrokes to operate. These essential commands would write, jump, foot, and save. Write would use 5+ parameters to make changes to the loaded data in RAM. The first pair of two parameters would be line address range (inclusive of bottom), the second pair of two parameters would be the data range within the lines (inclusive of bottom). The jump command would cut off values beneath the parameter given, thus jumping to a segment of code for easy editing. The foot command would cut off values at or above the parameter given, the setting the bottom/foot of the code. The save command would overwrite the file with the changes in ram. This was accomplished shortly with just a few errors. We had an error where after saving the file (with or without changes) if you pressed Ctrl-C to exit the file would be emptied despite having contents written over when saved. To fix this we had to an interrupt override event to the Ctrl-C command that would perform a safe for saving exit. In the future of development we hope add to serial communication functionality to this program and a second program on the brain so that we can modify the files without having to remove the sd card from the brain. We also hope to then upon completion of that development add a GUI to the editor program so that it is more accessible for others if we choose to make our autonomous system public.