CS 521 Final Project

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**Project Summary**

For my final project for the course, I made a representation of the interface between two python programs, one on a computer and the other on a macro pad. My projects consist of two simulators for these programs, combined in a main file for user input and output to terminal and text file. This project allows me to test and develop my program of my real macro pad without the physical device, meaning it can be shared and used by other developers or users of this macro pad device. This speeds up to optimizing process and I don’t have to constantly deal with the hardware of the device and the issues with connections.

The program in this representation is the one I use in the device currently, an extended clipboard. The macro pad acts as an additional 12 spaces for storing copy/paste data, and leaves the standard copy/paste data slop, also called the clipboard, unaffected when doing so. This makes the device exceptionally useful when formatting code manually or writing repetitious yet non-simple code.

**Code Instructions**

Run either Macropad\_Simulator.py or Desktop\_Simulator.py to test their method not requiring user input. Then run main.py. In main.py, enter 1-12 or 13 when prompted to hit one of the 12 keys or press the dial controlling erase mode. Keys will either prompt for text to simulate a copy, or print their contents when they have them, when pressed, but if erase mode is on it erases the contents tied to that key. Testing for some methods is dependent on user input and are therefore not tested with assert statements as asked for in the prompt.

**Additional Notes**

* I decided to include the code this project is made to represent, however I did not discuss with you the modules used in that code beforehand, so I’d like to state here that the extra code in the folder included with my python files is NOT part of my project, but something I thought you may want to see when looking at my project code. I understand that not alerting the professor ahead of time of modules outside the standard python build will result in a penalty to the grade, so I want to stress that the folder is NOT part of my final project code and I do not wish to be graded on it’s contents. The two programs look different but have nearly identical code, just formatted differently.