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Programming Assignment 4

For this assignment, I used a file locking library named filelock. It allows my program to easily create a lock file for my tables, acquire the lock, and release with just method calls from the key object. My program reads input from the user and when it sees the keywords "begin transaction", it enters a while loop that can only be broken when the keyword "commit" is typed in. This is where I create a new file lock and acquire it. Then it waits for input from the user to update the locked file, and finally releases the lock when the user enters a commit. If the user is using a second terminal to run the program while another terminal is already making changes to the lock file, then they will be given an error when they attempt to acquire the lock via timeout. This takes around 5 seconds to fully make sure that the lock can't be acquired, and the error message is implemented via a try, except block. This program does require downloading one library in order to be used called filelock. Anyone with the latest version of pip should be able to easily install it via the command "pip install filelock". As for running the program, all you will need is python and it should be able to be ran via the command "python 8001175981_pa4.py"