Computer Science 457 Project 3

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**How to run Database.py?**

Simply change your current working directory to the one containing the Database.py file. Then Simply run python3 Database.py to start an instance, in this case two different instances. An example can be seen below:



Copy and paste commands exactly as they are in the test script, including semi-colons.

**Functionality**

From the test script that I was provided we had to implement one main functionality, which is transaction-based updates to databases. To make sure multiple processes don’t mutate the same database at any given moment and cause data corruption. The way this is implemented in my version of the database is that when a process begins a transaction it will create a file named as the table with “\_lock” appended to it. Any other process that would attempt to mutate data in the table will be unable to access it. Once the original transaction is complete the new table is written to memory and the lock is removed for other process to be able to edit the table.