Computer Science 457 Project 1

By Justin Carlson

**How your program organizes multiple databases?**

My program organized multiple databases by creating a directory for each new database.

**How your program organizes multiple tables?**

My program organized multiple tables by creating a new text file for each new table in the database directory and then storing keys and data types with in the first line of the table file.

**Functionality**

From the test script that I was provided we had to implement 5 different SQL commands to get the specified functionality functioning. Those being Create, Drop, Use, Select, and Alter.

The Create command is implemented to check if the specified Database/Table is already created and will fail if it already exists. Otherwise it will create a directory/file with the specified database/table name.

The Drop command is implemented to check if the specified Database/Table is created and will fail if it doesn’t already exist. If the Database/Table does exist, it will then be deleted.

The Use command is the simplest of the 5, it is implemented to check if the Database exists and will fail if it does not exist. If it does exist, the global variable used to store the name of the in-use database will be set to the name of the specified Database.

The Select command is implemented to check if the specified Table exists in the current Database. If it doesn’t the command will fail. If it does exist, the command will print out the contents of the file, currently only being the keys and the datatypes. But will be more developed in Project 2.

The Alter command is implemented to check if the specified Table exists in the current Database. If it doesn’t, the command will fail. If it does exist, the command will handle whether to drop or add from the table, currently only being the keys and the datatypes. But will be more developed in Project 2.