**Database Project Part 4b**

**Data Manipulation Language Scripts**

This assignment demonstrates your use of SQL commands. You will need to take screen captures of before and after results that show each command was successful. You only need to demonstrate the commands specified on the number of tables necessary. You do NOT need to perform these actions on every table.

Write the SQL commands for twelve queries. Two queries should be insert statements, two should update statements, one should be a delete statement, one should be a simple select statement that selects a subset of the rows and columns from one table, two queries should be a select statements that select data from a joining of two tables, three queries should use summary functions to generate statistics about the data, and one query should be a multi-table query. Show the queries and screenshots of the results in your Word document **report**, and save your queries in a commented sql script to GitHub.

1. Add a new column of type ‘ENUM’. Document in your report what the purpose of this column is, and what the choices represent. Add a constraint that prevents null values. Take screen captures of your table before and after the column is created.

2. Insert a new record of data into the same table that you added the new column. This requires two steps:

a) show that the system throws an error if you try to leave the required ‘enum’ value blank.

b) modify your insert to include a valid entry so that the data works properly.

If you can fit all of this in one screen capture, that would be acceptable.

3. In your report, explain what changes you can make to each column of the record you just added in #2. Then, modify that data to show those changes. Include a screen capture that shows the ‘after’ result. The ‘before’ state is already documented from step 2.

4. Delete the new record. Use the ‘where’ clause to specifically select just the new record. Show a screen capture of the command and the ‘after’ result.   
  
5. Demonstrate the use of the ‘AUTO\_INCREMENT’ constraint by adding a record to a table with this feature. If you do not have this feature already enabled, then alter a table to include a new column. Show a screen capture of the table before you add the new record, and another screen capture after you add the new record to demonstrate the autoincrement.

6. Repeat step 5, except demonstrate the use of the ‘DEFAULT’ constraint by adding a record to a table with this feature. You may need to add a column with this feature if you don’t already have it. Prove that adding a new record of data without this value during entry will still get the default value after your ‘insert’ command executes.

Rubric: Your work will be graded as follows:

* Completing step 1: 8 points
* Completing step 2: 5 points
* Completing step 3: 5 points
* Completing step 4: 4 points
* Completing step 5: 5 points
* Completing step 6: 8 points

Total points possible: 35