PROG2220: S.Q.L. (MySQL)
Assignment 3

Assignment Type: INDIVIDUAL

Due Date: Week 8 (start of class)

Note: Review the output files provided (XXA03*.out). *Display the question headers in your output files.*

Topic: Data Manipulation Language (Insert, Update, Delete)

Important: After each DML statement, you must show the number of rows affected (i.e., call **ROW_COUNT**() immediately after the INSERT/UPDATE/DELETE).

Tip: Review and test the sample XXA03Task0.sql and XXA03Task0.out files. *Before you run your A3 solution, run all the create database SQL scripts to get consistent results.*

Task 1. Textbook Exercises

Do all the Chapter 5 textbook exercises (pages 164-165). **Submit only the 4 questions listed below.**

Save your solution to **XXA03Task1.sql**. Redirect your output to **XXA03Task1.out**.

Tip: Compare your solution to the textbook exercise solutions under G:\mysql\ex_solutions.

Assumption: You have databases created from G:\mysql\db_setup\create_databases.sql (part of Lab 1).

Q1. Textbook Exercise 5-04 (page 164) [2 points]

Q2. Textbook Exercise 5-05 (page 165) [2 points]

Note: Instead of hard-coded primary key value, use the **LAST_INSERT_ID()** function.

Q3. Textbook Exercise 5-06 (page 165) [2 points]

Q4. Textbook Exercise 5-09 (page 165) [4 points]

Task 2. My Guitar Shop (MGS) Database

Save your solution to **XXA03Task2.sql**. Redirect your output to **XXA03Task2.out**.

Assumption: You have MGS database created from
G:\mysql\mgs_ex_starts**create_my_guitar_shop.sql** (part of **Lab 2**).

Q1. MGS Exercise 5-1 [8 points]

a. Write an INSERT statement that adds this row to the Categories table:

- category_name: Wind
- Code the INSERT statement so MySQL automatically generates the category_id column.

b. Write an UPDATE statement that modifies the row you just added to the Categories table. This statement should change the category_name column to "String", and it should use the category_id column to identify the row.

c. Write a DELETE statement that deletes the row you just added to the Categories table. This statement should use the category_id column to identify the row.

Q2. MGS Exercise 5-4 [6 points]

a. Write an INSERT statement that adds this row to the Products table:

- product_id: The next automatically generated ID
- category_id: 4
- product_code: dgx_640
- product_name: Yamaha DGX 640 Digital Piano
- description: This is the Yamaha DGX 640 Digital Piano with 88 keys.
- list_price: $845.95
- discount_percent: 10%
- date_added: Today's date and time.

Use a column list for this statement.

b. Write an UPDATE statement that modifies the product you just added. This statement should change the discount_percent column from 10% to 30%.

Q3. MGS Exercise 5-7 [6 points]

a. Write an INSERT statement that adds this row to the Customers table:

- email_address: yourname@conestogac.on.ca (Use your real name)
- password: (empty string)
- first_name: your_first_name
- last_name: your_last_name

Use a column list for this statement.

b. Write an UPDATE statement that modifies the Customers table. Change the password column to "s3cr3t" for the customer with an email address of yourname@conestogac.on.ca. This will update 1 row.

Task 3. Software Expert (SWE) Database

Save your solution to **XXA03Task3.sql**. Redirect your output to **XXA03Task3.out**.

Assumption: You have SWE database created from G:\mysql\swexpert**swexpert.sql** (part of **Lab 3**).

Q1. SWE Exercise 1 [2 points]

You were hired as a new consultant. Add a new record as follows:

- c_id: 106
- c_last: (Your last name)
- c_first: (Your first name)
- c_mi: (Your middle initial)
- c_add: (Your fake address)
- c_city: (Your fake city)
- c_state: (Your fake province code)
- c_zip: (Your fake postal code)
- c_phone: (Your fake phone)
- c_email: (Your fake email)

All column values must not be null.

Q2. SWE Exercise 2 [2 points]

The company got a new client. Add a new record as follows:

- client_id: 17
- client_name: City of Waterloo
- contact_last: Jaworsky
- contact_first: Dave
- contact_phone: 519 886 1550

Q3. SWE Exercise 3 [3 points]

As a new consultant, you were assigned as the manager of a new project. Add a new project named 'ION Rapid Transit' with a project ID of 88. The parent project of 'ION Rapid Transit' project is unassigned.

Q4. SWE Exercise 4 [3 points]

Write an UPDATE statement that modifies the parent project of Project table. Assign all projects without a parent project to the newly added project. The parent project of 'ION Rapid Transit' project must remain unassigned.

Assignment Submissions

Reminder: All printouts must be stapled and submitted **in the correct sequence**!

1. Download and print the **PROG2220_CoverPage.pdf** (PROG2220 Assignment Cover Page and Standards Marking Sheet) posted in eConestoga. **All the sections** of the Cover page must be filled.
2. A printout of **A3Marking.pdf**
3. A printout of **XXA03Task1.sql**, where XX is your initials in upper case letters
4. A printout of **XXA03Task1.out**
5. A printout of **XXA03Task2.sql**
6. A printout of **XXA03Task2.out**
7. A printout of **XXA03Task3.sql**
8. A printout of **XXA03Task3.out**