PROG2220: S.Q.L. (MySQL)
Assignment 2

Assignment Type: INDIVIDUAL

Due Date: Week 6 (start of class)

Note: Review the output files provided (XXA02Task1.out & XXA02Task2.out). *Display the question headers in your output files.*

Topic: Retrieve data from multiple tables

Warm Up: Textbook Exercises

Do all the Chapter 4 textbook exercises (pages 146-147). Compare your solution to the textbook exercise solutions under G:\mysql\ex_solutions. Do not submit your textbook exercise solution.

Task 1. My Guitar Shop (MGS) Database

Save your solution to **XXA02Task1.sql**. Redirect your output to **XXA02Task1.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 4-1 [5 points]

Write a SELECT statement that joins the Categories table to the Products table and returns these columns: category_name, product_name, list_price. Sort the result set by category_name and then by product_name in ascending sequence.

Q2. MGS Exercise 4-2 [5 points]

Write a SELECT statement that joins the Customers table to the Addresses table and returns these columns: first_name, last_name, line1, city, state, zip_code. Return one row for each address for the customer with an email address of *allan.sherwood@yahoo.com*.

Q3. MGS Exercise 4-4 [5 points]

Write a SELECT statement that joins the Customers, Orders, Order_Items, and Products tables. This statement should return these columns: last_name, first_name, order_date, product_name,

item_price, discount_amount, and quantity. Use aliases for the tables. Sort the final result set by last_name, order_date, and product_name.

Q4. MGS Exercise 4-5 [5 points]

Write a SELECT statement that returns the product_id, product_name and list_price columns from the Products table. Return one row for each product that has the same list price as another product.

Hint: Use a self-join to check that the product_id columns are not equal but the list_price columns are equal.

Q5. MGS Exercise 4-7 [5 points]

Use the 'union' operator to generate a result set consisting of three columns from the Orders table:

- ship_status: A calculated column that contains a value of SHIPPED or NOT SHIPPED
- order_id: The order_id column
- order_date: The order_date column

If the order has a value in the ship_date column, the ship_status column should contain a value of SHIPPED. Otherwise, it should contain a value of NOT SHIPPED. Sort the final result set by order_date.

Task 2. Software Expert (SWE) Database

Save your solution to **XXA02Task2.sql**. Redirect your output to **XXA02Task2.out**.

Install the SWE database: You must have G:\mysql\swexpert**swexpert.sql**. You must have completed Lab 3.

Q1. SWE Exercise 1 [2 points]

Retrieve the names of the cities which each consultant lives. Suppress duplicate outputs, and display the values in alphabetical order.

Q2. SWE Exercise 2 [2 points]

Retrieve the project ID and project name of all projects that have parent projects.

Q3. SWE Exercise 3 [4 points]

Using only the project table, display the project id, project name, parent project's id along with the parent project's name. Include all the projects even if they do not have any parent project assigned.

Hint: Use a self-join.

Q4. SWE Exercise 4 [3 points]

Write a SELECT statement that returns the consultant ID, skill ID and certification from the consultant_skill table. List only for all consultants with skills that are certified. Sort the final result set by skill ID, followed by consultant ID.

Q5. SWE Exercise 5 [4 points]

List all the consultant ID, last name and first name, skill ID and skill description, only for all consultants with skills that are certified. Sort the final result set by skill ID, followed by consultant ID.

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 **A2Marking.pdf**
3. A printout of **XXA02Task1.sql**, where XX is your initials in upper case letters
4. A printout of **XXA02Task1.out**
5. A printout of **XXA02Task2.sql**
6. A printout of **XXA02Task2.out**