**INFO 579 Week 7 Assignment**

Course:  INFO 579: SQL/NoSQL Databases for Data and Information Sciences

Module/Week: 7 - Week of October 2, 2023

**Topic: Join Operations**

NOTE: The assignment document must provide the below information. Up to 10 points may be deducted due to the lack of the below information.

Student’s Full Name:

Course Title:

Term name and year: Example, Fall 2023

Submission Week: [example, Week 7 Assignment]

Instructor’s Name:

Date of Submission:

The above information must be provided at the upper left corner of the first page of the document.

Each answer(s) must be preceded by the question/ title of the topic/article of the assignment.

Acceptable File: Word (put the screenshots of the models) or PDF.

File Name Format: Name your file according to this convention: INFO579\_Week7\_Lastname.pdf. Submission must be made in a single document.

NOTE: There will be a 20% deduction of points for any late submission.

**Reading Requirements for this Assignment:**

Read the Data file titled, INFO579\_Week7\_Assignment\_Data.xlsx, uploaded to the Week 7 Assignment folder in D2L. You are using the same data that you already loaded into your database tables as part of previous week’s assignment. Also, read the slides uploaded to the Week 7 folder in D2L.

**NOTE-1:** All data display must be made based on SQL. No data display should be made using any graphical tool (e.g., MySQL workbench has such things).

**NOTE-2:** You cannot do any UPDATE statement to the data you already loaded in the tables. If you think, you have data integrity issue, you can empty the table(s) and reload. Also, you cannot create any additional table(s) to do this assignment.

**NOTE-3**: All SQL must specify join types (e.g., INNER JOIN, LEFT OUTER JOIN as appropriate):

**Example1**: This query with no explicit mention of JOIN type is NOT acceptable:

SELECT T1.TrainingName, T2.TrainerFirstName, T2.TrainingLastName

FROM Worker.Training AS T1, Worker.Trainer AS T2

ON T1.TrainingID = T2.TrainingID;

**Example2**: This the correct way of writing SQL with explicit mention of JOIN type:

SELECT T1.TrainingName, T2.TrainerFirstName, T2.TrainingLastName

FROM Worker.Training AS T1

INNER JOIN

Worker.Trainer AS T2

ON T1.TrainingID = T2.TrainingID;

**Assignment Instructions: Answer the following questions and provide screenshots, code, and results in a Word document or PDF file. You must put each question (question no. & description) before your answers. All screenshots must be easily readable. Always take the screenshot of what is needed instead taking the screenshot of the whole page. Grade points: 50 (5 points for each question).**

1. Write a single-row subquery to display EmployeeID, FirstName, LastName, and HireDate of employees hired after employee Vivek Pandey. Sort the results by EmployeeID. Make sure you show the print screen of the complete set of the rows and columns.

2. Write a query to display FirstName, LastName, and TrainingName for employee Tom Harper. Sort the results by TrainingName.

3. Write a query to display the complete list of Trainings, and trainers (first and last name as separate columns) available for each training. Sort the output by TrainingName and Trainers' first and last name. Make sure you show the print screen of the complete set of the rows and columns.

4. Write a multiple-row subquery to display EmployeeID, FirstName, LastName, and HireDate of employees who work for the following departments: Accounting and Finance, IT Support, and Production. Sort the results by EmployeeID. Make sure you show the print screen of the complete set of the rows and columns.

5. Write a query to display the EmployeeID, FirstName, LastName, EquipmentName, and EquipmentCostAmount for two of the employees. Sort the results by EmployeeID. Make sure you show the print screen of the complete set of the rows and columns.

6. Write a query to display the TrainingID, TrainingName, TrainerID, TrainerFirstName, and TrainerLastName with the trainers who did not provide their last name. Sort the results by TrainingID and TrainerID. Make sure you show the print screen of the complete set of the rows and columns.

7. Write a query to display the distinct list of equipments used by the current employees. Sort the output by EquipmentName. Make sure you show the print screen of the complete set of the rows and columns.

8. Write a query to display the FirstName, LastName, TrainingName, and trainer(s) (with first and last name in two separate columns) for two of the employees. Sort the results by employee LastName and TrainingName. Make sure you show the print screen of the complete set of the rows and columns.

9. Write a query to display the EmployeeID, FirstName, LastName, DepartmentID, DepartmentName, EquipmentID, EquipmentName for all employees. Sort the results by EmployeeID, DepartmentID, and EquipmentID. Make sure you show the print screen of the complete set of the rows and columns.

10. Write a query to display the EmployeeID, FirstName, LastName, DepartmentID, DepartmentName, TrainingID, TrainingName for all employees. Sort the results by EmployeeID, DepartmentID, and TrainingID. Make sure you show the print screen of the complete set of the rows and columns.

**End**