## Instructions:

* The assignment aims to reinforce SQL query skills using the **WideWorldImporters** database. You will write and execute SQL queries to retrieve and manipulate data using various SQL constructs covered in Chapter 4 of our SQL text.
* Write SQL queries that fulfill the requirements listed below.
* Use appropriate column names, functions, and sorting techniques where necessary.
* Ensure queries return meaningful results based on the dataset.
* Save your work as a .sql file and upload it to D2L Dropbox folder for the assignment. Use the following file naming convention: *yourFirstName\_yourLastName\_SQL\_HW\_02.sql*

1. Write a query to retrieve a list of customers and their sales orders, displaying the customer name and order date. Use table aliases for readability.
   1. Tables: Sales.Customers, Sales.Orders
2. Retrieve a list of stock items, purchase prices, order dates, and supplier names for items that do not require refrigeration.
   1. Tables: Warehouse.StockItems, Purchasing.PurchaseOrderLines, Purchasing.PurchaseOrders, Purchasing.Suppliers
   2. The PurchaseOrderLines table links stock items to purchase orders, which in turn links to suppliers.
3. Retrieve the names of employees from the WideWorldImporters database along with the order numbers they serviced in the WideWorldImportersDW database.
   1. Tables: WideWorldImporters.Application.People, WideWorldImportersDW.Fact.[Order]
4. Retrieve a list of customers located in the same city as another customer. The output should include:
   1. The first customer's name.
   2. The second customer's name (who is from the same city).
   3. The city they both share.
   4. Tables: Sales, Customers, Application, Cities. To join the tables, use DeliveryCityID from the Customers table.
5. Retrieve a list of orders along with customer names and the stock items they purchased.
   1. Tables: Sales.Orders, Sales.OrderLines, Warehouse.StockItems, Sales.Customers
6. Retrieve a list of invoices along with customer details using implicit join syntax instead of INNER JOIN.
   1. Tables: Sales.Invoices, Sales.Customers
7. Retrieve a list of customers and their orders, ensuring that all customers appear in the output, even if they have no orders.
   1. Tables: Sales.Customers, Sales.Orders
8. Retrieve a list of orders, including details of the customer and salesperson, ensuring that all orders appear even if the customer or salesperson information is missing.
   1. Tables: Sales.Orders, Sales.Customers, HumanResources.Employees
9. Generate a combination of all possible stock items and suppliers.
   1. Tables: Warehouse.StockItems, Purchasing.Suppliers
10. Retrieve:
    1. A list of customers who have placed an order but have not received an invoice.
    2. A list of customers who have placed an order and also received an invoice.
    3. Tables: Sales.Customers, Sales.Orders, Sales.Invoices

**Grading Rubric**

Each query is worth \*\*10 points\*\*, evaluated based on the following criteria:

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| **Criteria** | **Excellent (10 - 9 pts)** | **Good (8 - 7 pts)** | **Satisfactory (6 - 5 pts)** | **Needs Improvement (4 - 0 pts)** |
| **Correctness of Query (50%)** | Query executes without errors and returns the expected result set. | Query executes with minor logical errors but mostly correct. | Query contains errors affecting correctness. | Query does not execute properly or is incorrect. |
| **Use of Required SQL Concepts (30%)** | Successfully applies the required SQL concepts. | Uses most required SQL concepts correctly. | Uses some SQL concepts but omits key elements. | SQL concepts are misused or omitted. |
| **Query Formatting & Readability (10%)** | Query is well-structured and properly formatted. | Query is readable but could use better formatting. | Query is difficult to read with inconsistent formatting. | Query lacks readability and proper structure. |
| **Use of Proper Column Naming and Aliasing (10%)** | All columns are named meaningfully. | Most columns are appropriately named. | Some columns are meaningfully named. | Column naming and aliasing are unclear or missing. |