TSQL Homework 03

Chapter 3, T-SQL Query Fundamentals

# **Readings**

Read Chapter 3 *T-SQL Query Fundamentals*.

# **Homework questions**

1. In general, why would you even want to join two (or more) tables together? This is a good time to think about the nature of relational algebra.
   * To get more precise answers or queries
2. Describe in your own words the output from an *inner join*.
   * Take row n x row m then filers using the ON predicate
3. Describe in your own words the output from an *outer join*.
   * Two processes that using inner joins with the ON filer and Adding Outer Rows.
4. Describe in your own words the output from an *cross join*.
   * Simples kind of row, if you have n and m you will combine them to get nm results.
5. A convenient mnemonic for remembering the various joins is “Ohio.” Why is this true?
6. Give an example of a *composite join.*
   * *Is a join where you need to match multiple attributes from each side. To match a primary key and a foreign key relationship is based on more than one attribute.*
7. What is the difference between the following two queries? The business problem is “How many orders do we have from each customer?”
   * The \* will count all row even if NULL, where the Count(<column name>) gives you the return needed.

================first query===============

SELECT C.custid, COUNT(\*) AS numorders FROM Sales.Customers AS C

LEFT OUTER JOIN Sales.Orders AS O ON C.custid = O.custid

GROUP BY C.custid;

================second query===============

SELECT C.custid, COUNT(O.orderid) AS numorders FROM Sales.Customers AS C

LEFT OUTER JOIN Sales.Orders AS O ON C.custid = O.custid

GROUP BY C.custid;

1. What might be one reason the following query does not return the column *custID* in this query?
   * The Where clause is using the orderdate from a different table.

SELECT C.custid, C.companyname, O.orderid, O.orderdate FROM Sales.Customers AS C

LEFT OUTER JOIN Sales.Orders AS O ON C.custid = O.custid

WHERE O.orderdate >= ’20160101’;