Chapter 3, Joins

ISTA-420, T-SQL Fundamentals

Readings

Chapter 3, Pages 103 – 123.

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.
2. Describe in your own words the output from an *inner join*.
3. Describe in your own words the output from an *outer join*.
4. Describe in your own words the output from an *cross join*.
5. A convenient mnemonic for remembering the various joins is "Ohio." Why is this true?
6. Give an example of a *composite join*.
7. What is the difference between the following two queries? The business problem is "How many orders do we have from each customer?"

```
        ================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;
```

8. What might be one reason the following query does not return the column *custID* in this query?

```
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';
```