

What's covered here?

- Common Types of SQL JOINS

Source Tables

Customer

| CustomerID | CustomerLastName |
|------------|------------------|
| 1 | Smith |
| 2 | Kim |
| 3 | Morgan |
| 4 | Reed |
| 5 | Lynch |

OrderHeader

| OrderID | OrderDate | OrderAmount | CustomerID |
|---------|-----------|-------------|------------|
| 1001 | 10/02/14 | 120 | 2 |
| 1002 | 10/03/14 | 767 | 3 |
| 1003 | 10/14/14 | 855 | 1 |
| 1004 | 10/15/14 | 1,245 | 1 |
| 1005 | 10/16/14 | 330 | 7 |
| 1006 | 10/10/14 | 557 | 4 |
| 1007 | 10/22/14 | 191 | 3 |

INNER JOIN

| Customer | | OrderHeader | | | |
|------------|------------------|-------------|-----------|-------------|------------|
| CustomerID | CustomerLastName | OrderID | OrderDate | OrderAmount | CustomerID |
| 1 | Smith | 1001 | 10/02/14 | 120 | 2 |
| 2 | Kim | 1002 | 10/03/14 | 767 | 3 |
| 3 | Morgan | 1003 | 10/14/14 | 855 | 1 |
| 4 | Reed | 1004 | 10/15/14 | 1,245 | 1 |
| 5 | Lynch | 1005 | 10/16/14 | 330 | 7 |
| | | 1006 | 10/10/14 | 557 | 4 |
| | | 1007 | 10/22/14 | 191 | 3 |

```
SELECT c.CustomerID, CustomerLastName, OrderID, OrderDate, OrderAmount
FROM Customer c
INNER JOIN OrderHeader o
ON c.CustomerID = o.CustomerID
ORDER BY c.CustomerID, OrderID
```

What's returned?

LEFT OUTER JOIN

| Customer | | OrderHeader | | | |
|------------|------------------|-------------|-----------|-------------|------------|
| CustomerID | CustomerLastName | OrderID | OrderDate | OrderAmount | CustomerID |
| 1 | Smith | 1001 | 10/02/14 | 120 | 2 |
| 2 | Kim | 1002 | 10/03/14 | 767 | 3 |
| 3 | Morgan | 1003 | 10/14/14 | 855 | 1 |
| 4 | Reed | 1004 | 10/15/14 | 1,245 | 1 |
| 5 | Lynch | 1005 | 10/16/14 | 330 | 7 |
| | | 1006 | 10/10/14 | 557 | 4 |
| | | 1007 | 10/22/14 | 191 | 3 |

```
SELECT c.CustomerID, CustomerLastName, OrderID, OrderDate, OrderAmount
FROM Customer c
LEFT OUTER JOIN OrderHeader o
ON c.CustomerID = o.CustomerID
ORDER BY c.CustomerID, OrderID
```

What's returned?

RIGHT OUTER JOIN

| Customer | | OrderHeader | | | |
|------------|------------------|-------------|-----------|-------------|------------|
| CustomerID | CustomerLastName | OrderID | OrderDate | OrderAmount | CustomerID |
| 1 | Smith | 1001 | 10/02/14 | 120 | 2 |
| 2 | Kim | 1002 | 10/03/14 | 767 | 3 |
| 3 | Morgan | 1003 | 10/14/14 | 855 | 1 |
| 4 | Reed | 1004 | 10/15/14 | 1,245 | 1 |
| 5 | Lynch | 1005 | 10/16/14 | 330 | 7 |
| | | 1006 | 10/10/14 | 557 | 4 |
| | | 1007 | 10/22/14 | 191 | 3 |

```
SELECT c.CustomerID, CustomerLastName, OrderID, OrderDate, OrderAmount
FROM Customer c
RIGHT OUTER JOIN OrderHeader o
ON c.CustomerID = o.CustomerID
ORDER BY c.CustomerID, OrderID
```

What's returned?