

Slide 1: Advanced Joins: Left, Right and Full Outer Joins

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**EXTENSION**

Slide 2: SQL Lite vs. Other SQL DBMS

## **SQL Lite vs. Other SQL DBMS**

SQL Lite only does Left Joins

Other database management systems  
use all joins

Slide 3: Learning Objectives

## Learning Objectives

Explain how left, right and full outer joins work

Identify situations to use each type of join

Use each type of join to combine data from multiple tables

Slide 4: Left Join

## Left Join

Returns all records from the left table (table1), and the matched records from the right table (table2)

The result is NULL from the right side, if there is no match



Slide 5: Left Join



Slide 6: Right Join

## Right Join

Returns all records from the right table (table2), and the matched records from the left table (table1)

The result is NULL from the left side, when there is no match



Slide 7: Right Join

## Right Join

The table you list first is acted upon by the type of join you use.



Slide 8: Full Outer Join

## Full Outer Join

Return all records when there is a match in either left (table1) or right (table2) table records

“Give me everything”





## Slide 9: Left Join

## Left Join

The following SQL statement will select all customers, and any orders they might have:

```
SELECT C.CustomerName, O.OrderID
FROM Customers C
LEFT JOIN Orders O ON C.CustomerID
= O.CustomerID
ORDER BY C.CustomerName;
```

## Slide 10: Right Join

## Right Join

The following SQL statement will return all employees, and any orders they might have placed:

```
SELECT Orders.OrderID,  
       Employees.LastName,  
       Employees.FirstName  
  
FROM Orders  
  
RIGHT JOIN Employees ON  
Orders.EmployeeID =  
Employees.EmployeeID  
  
ORDER BY Orders.OrderID;
```

Slide 11: Right Join

## Right Join

Difference between right and left is the order the tables are relating

Left joins can be turned into right joins by reversing the order of the tables

## Slide 12: Full Outer Join

## Full Outer Join

Full Join / The following SQL statement selects all customers, and all orders:

```
SELECT Customers.CustomerName,  
Orders.OrderID  
  
FROM Customers  
  
FULL OUTER JOIN Orders ON  
Customers.CustomerID=  
Orders.CustomerID  
  
ORDER BY Customers.CustomerName;
```

Slide 13: Summary

# Summary

Left Join

Right Join

Full Outer Join