**SQL INNER JOIN Keyword**

* The INNER JOIN keyword selects all rows from both tables as long as there is a match between the columns in both tables.

**SQL INNER JOIN Syntax**

* SELECT *column\_name(s)*  
  FROM *table1*  
  INNER JOIN *table2*  
  ON *table1.column\_name*=*table2.column\_name*;

or:

* SELECT *column\_name(s)*  
  FROM *table1*  
  JOIN *table2*  
  ON *table1.column\_name*=*table2.column\_name*;



* Below is a selection from the "Customers" table:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CustomerID** | **CustomerName** | **ContactName** | **Address** | **City** | **PostalCode** | **Country** |
| 1 | Alfreds Futterkiste | Maria Anders | Obere Str. 57 | Berlin | 12209 | Germany |
| 2 | Ana Trujillo Emparedados y helados | Ana Trujillo | Avda. de la Constitución 2222 | México D.F. | 05021 | Mexico |
| 3 | Antonio Moreno Taquería | Antonio Moreno | Mataderos 2312 | México D.F. | 05023 | Mexico |

* And a selection from the "Orders" table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **OrderID** | **CustomerID** | **EmployeeID** | **OrderDate** | **ShipperID** |
| 10308 | 2 | 7 | 1996-09-18 | 3 |
| 10309 | 37 | 3 | 1996-09-19 | 1 |
| 10310 | 77 | 8 | 1996-09-20 | 2 |

**SQL INNER JOIN Example**

* The following SQL statement will return all customers with orders:

**Example**

SELECT Customers.CustomerName, Orders.OrderID  
FROM Customers  
INNER JOIN Orders  
ON Customers.CustomerID=Orders.CustomerID  
ORDER BY Customers.CustomerName



**SQL LEFT JOIN Syntax**

* SELECT *column\_name(s)*  
  FROM *table1*  
  LEFT JOIN *table2*  
  ON *table1.column\_name*=*table2.column\_name*;

or:

* SELECT *column\_name(s)*  
  FROM *table1*  
  LEFT OUTER JOIN *table2*  
  ON *table1.column\_name*=*table2.column\_name*;

**SQL LEFT JOIN Example**

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

**Example**

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

**SQL RIGHT JOIN Syntax**

* SELECT *column\_name(s)*  
  FROM *table1*  
  RIGHT JOIN *table2*  
  ON *table1.column\_name*=*table2.column\_name*;
* or:
* SELECT *column\_name(s)*  
  FROM *table1*  
  RIGHT OUTER JOIN *table2*  
  ON *table1.column\_name*=*table2.column\_name*;



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **OrderID** | **CustomerID** | **EmployeeID** | **OrderDate** | **ShipperID** |
| 10308 | 2 | 7 | 1996-09-18 | 3 |
| 10309 | 37 | 3 | 1996-09-19 | 1 |
| 10310 | 77 | 8 | 1996-09-20 | 2 |

* And a selection from the "Employees" table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **EmployeeID** | **LastName** | **FirstName** | **BirthDate** | **Photo** | **Notes** |
| 1 | Davolio | Nancy | 12/8/1968 | EmpID1.pic | Education includes a BA in psychology..... |
| 2 | Fuller | Andrew | 2/19/1952 | EmpID2.pic | Andrew received his BTS commercial and.... |
| 3 | Leverling | Janet | 8/30/1963 | EmpID3.pic | Janet has a BS degree in chemistry.... |

SELECT Orders.OrderID, Employees.FirstName  
FROM Orders  
RIGHT JOIN Employees  
ON Orders.EmployeeID=Employees.EmployeeID  
ORDER BY Orders.OrderID;  
**SQL FULL OUTER JOIN Keyword**

* The FULL OUTER JOIN keyword returns all rows from the left table (table1) and from the right table (table2).
* The FULL OUTER JOIN keyword combines the result of both LEFT and RIGHT joins.

**SQL FULL OUTER JOIN Syntax**

* SELECT *column\_name(s)*  
  FROM *table1*  
  FULL OUTER JOIN *table2*  
  ON *table1.column\_name*=*table2.column\_name*;



* 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;