SQL INNER JOIN

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INNER JOIN

The `INNER JOIN` keyword selects records that have matching values in both tables.

Let's look at a selection of the **Products** table:

ProductID	ProductName	CategoryID	Price
1	Chais	1	18
2	Chang	1	19
3	Aniseed Syrup	2	10

And a selection of the **Categories** table:

CategoryID	CategoryName	Description
1	Beverages	Soft drinks, coffees, teas, beers, and ales
2	Condiments	Sweet and savory sauces, relishes, spreads, and seasonings
3	Confections	Desserts, candies, and sweet breads

We will join the Products table with the Categories table, by using the `CategoryID` field from both tables:

Example

Join Products and Categories with the INNER JOIN keyword:


```
SELECT ProductID, ProductName, CategoryName
FROM Products
INNER JOIN Categories ON Products.CategoryID = Categories.CategoryID;
```

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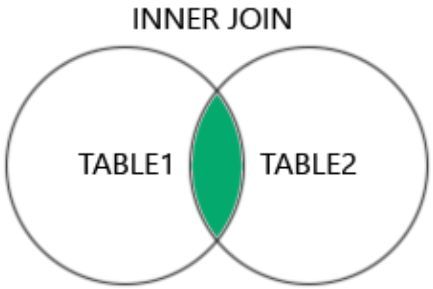

Note: The `INNER JOIN` keyword returns only rows with a match in both tables. Which means that if you have a product with no CategoryID, or with a CategoryID that is not present in the Categories table, that record would not be returned in the result.

Syntax

```
SELECT column_name(s)
FROM table1
INNER JOIN table2
ON table1.column_name = table2.column_name;
```

Naming the Columns

It is a good practice to include the table name when specifying columns in the SQL statement.

Example

Specify the table names:

```
SELECT Products.ProductID, Products.ProductName, Categories.CategoryName
FROM Products
INNER JOIN Categories ON Products.CategoryID = Categories.CategoryID;
```

Try it Yourself »

The example above works without specifying table names, because none of the specified column names are present in both tables. If you try to include `CategoryID` in the `SELECT` statement, you will get an error if you do not specify the table name (because `CategoryID` is present in both tables).

JOIN or INNER JOIN

`JOIN` and `INNER JOIN` will return the same result.

`INNER` is the default join type for `JOIN`, so when you write `JOIN` the parser actually writes `INNER JOIN`.

Example

JOIN is the same as INNER JOIN:

```
SELECT Products.ProductID, Products.ProductName, Categories.CategoryName
FROM Products
JOIN Categories ON Products.CategoryID = Categories.CategoryID;
```

Try it Yourself »

JOIN Three Tables

The following SQL statement selects all orders with customer and shipper information:

Example

```
SELECT Orders.OrderID, Customers.CustomerName, Shippers.ShipperName
FROM ((Orders
INNER JOIN Customers ON Orders.CustomerID = Customers.CustomerID)
INNER JOIN Shippers ON Orders.ShipperID = Shippers.ShipperID);
```

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Test Yourself With Exercises

Exercise:

Choose the correct `JOIN` clause to select all records from the two tables where there is a match in both tables.

```
SELECT *
FROM Orders
```

```
ON Orders.CustomerID=Customers.CustomerID;
```

Submit Answer »

Start the Exercise