SQL AND, OR and NOT Operators

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The SQL AND, OR and NOT

Operators

The WHERE clause can be combined with AND, OR, and NOT operators.

The AND and OR operators are used to filter records based on more than one condition:

- The AND operator displays a record if all the conditions separated by AND are TRUE.
- The OR operator displays a record if any of the conditions separated by OR is TRUE.

The NOT operator displays a record if the condition(s) is NOT TRUE.

AND Syntax

```
SELECT column1, column2, ...
FROM table_name
WHERE condition1 AND condition2 AND condition3 ...;
```

OR Syntax

```
SELECT column1, column2, ...
FROM table_name
WHERE condition1 OR condition2 OR condition3 ...;
```

NOT Syntax

```
SELECT column1, column2, ...
FROM table_name
WHERE NOT condition;
```

Demo Database

The table below shows the complete "Customers" table from the Northwind sample database:

CustomerID	CustomerName	ContactName	Address	City	Pc
1	Alfreds Futterkiste	Maria Anders	Obere Str. 57	Berlin	12
2	Ana Trujillo Emparedados y helados	Ana Trujillo	Avda. de la Constitución 2222	México D.F.	05
3	Antonio Moreno Taquería	Antonio Moreno	Mataderos 2312	México D.F.	05
4	Around the Horn	Thomas Hardy	120 Hanover Sq.	London	W
5	Berglunds snabbköp	Christina Berglund	Berguvsvägen 8	Luleå	S-
6	Blauer See Delikatessen	Hanna Moos	Forsterstr. 57	Mannheim	68
7	Blondel père et fils	Frédérique Citeaux	24, place Kléber	Strasbourg	67
8	Bólido Comidas	Martín Sommer	C/ Araquil. 67	Madrid	28`

AND Example

The following SQL statement selects all fields from "Customers" where country is "Germany" AND city is "Berlin":

Example

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```
SELECT * FROM Customers
WHERE Country='Germany' AND City='Berlin';
```

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OR Example

The following SQL statement selects all fields from "Customers" where city is "Berlin" OR "München":

Example

```
SELECT * FROM Customers
WHERE City='Berlin' OR City='München';
Try it Yourself »
```

The following SQL statement selects all fields from "Customers" where country is "Germany" OR "Spain":

Example

```
SELECT * FROM Customers
WHERE Country='Germany' OR Country='Spain';
Try it Yourself »
```

NOT Example

The following SQL statement selects all fields from "Customers" where country is NOT "Germany":

Example

```
SELECT * FROM Customers
WHERE NOT Country='Germany';
Try it Yourself »
```

Combining AND, OR and NOT

You can also combine the AND, OR and NOT operators.

The following SQL statement selects all fields from "Customers" where country is "Germany" AND city must be "Berlin" OR "München" (use parenthesis to form complex expressions):

Example

```
SELECT * FROM Customers
WHERE Country='Germany' AND (City='Berlin' OR City='München');
Try it Yourself »
```

The following SQL statement selects all fields from "Customers" where country is NOT "Germany" and NOT "USA":

Example

```
SELECT * FROM Customers
WHERE NOT Country='Germany' AND NOT Country='USA';
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```

Test Yourself With Exercises

Exercise:

Select all records where the City column has the value 'Berlin' and the PostalCode column has the value 12209.

```
* FROM Customers
City = 'Berlin'
```

= 12209;

Submit Answer »

Start the Exercise