



MySQL

DDL AND DML STATEMENTS CONTINUATION...

The MySQL SELECT with WHERE Clause

Demo Database:

Below is a selection from the "Customers" table in the Northwind sample database:northwind_db

CustomerID Int(1)	CustomerName Varchar(20)	ContactName Varchar(20)	Address Varchar(15)	City Varchar(15)	PostalCode Varchar(15)	Country Varchar(15)
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
4	Around the Horn	Thomas Hardy	120 Hanover Sq.	London	WA1 1DP	UK
5	Berglunds snabbköp	Christina Berglund	Berguvsvägen 8	Luleå	S-958 22	Sweden

MySQL 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  
...;
```

Example:

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

OR Syntax

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

Example:

```
SELECT * FROM Customers  
WHERE Country = 'Germany' OR Country = 'UK';
```

NOT Syntax

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

Example:

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


Combining AND, OR and NOT

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

```
SELECT * FROM Customers
WHERE Country = 'Germany' AND (City = 'Berlin' OR City = 'Lulea');
```

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

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

The MySQL ORDER BY Keyword

The ORDER BY keyword is used to sort the result-set in ascending or descending order.

The ORDER BY keyword sorts the records in ascending order by default. To sort the records in descending order, use the DESC keyword.

ORDER BY Syntax

```
SELECT column1, column2, ...  
FROM table_name  
ORDER BY column1, column2, ... ASC | DESC;
```

ORDER BY Example

The following SQL statement selects all customers from the "Customers" table, sorted by the "Country" column:

```
SELECT * FROM Customers  
ORDER BY Country;
```

ORDER BY DESC Example

The following SQL statement selects all customers from the "Customers" table, sorted DESCENDING by the "Country" column:

```
SELECT * FROM Customers  
ORDER BY Country DESC;
```

ORDER BY Several Columns Example

```
SELECT * FROM Customers  
ORDER BY Country, CustomerName;
```

ORDER BY Several Columns Example 2

```
SELECT * FROM Customers  
ORDER BY Country ASC, CustomerName DESC;
```