WHERE Clause

MySQL WHERE Clause

We know that the SQL SELECT command is used to fetch records from a MySQL table. In addition to that, we can also use a conditional clause called the WHERE Clause in conjunction with the SELECT statement to filter out the results. Using this WHERE clause, we can specify a selection criteria to select the required records from a table.

The WHERE clause works like an if condition in any programming language. This clause is used to compare the given value with the field value available in a MySQL table. If the given value from outside is equal to the available field value in the MySQL table, then it returns that row.

Operators Used in WHERE Clause

Here is the list of comparison operators, which can be used with the WHERE clause.

- **=:** Checks if the values of the two operands are equal or not, if yes, then the condition becomes true.
- **!=:** Checks if the values of the two operands are equal or not, if the values are not equal then the condition becomes true.
- **>:** Checks if the value of the left operand is greater than the value of the right operand, if yes, then the condition becomes true.
- **<:** Checks if the value of the left operand is less than the value of the right operand, if yes then the condition becomes true.
- **>=:** Checks if the value of the left operand is greater than or equal to the value of the right operand, if yes, then the condition becomes true.
- **<=:** Checks if the value of the left operand is less than or equal to the value of the right operand, if yes, then the condition becomes true.

Along with these, the WHERE clause can also contain logical operators, like AND, OR and NOT.

- **AND:** If an AND operator is used in WHERE Clause with two conditions, the query will return true only if both the conditions are satisfied**.**
- **OR:** If an OR operator is used in WHERE Clause with two conditions, the query will return true only if either of the conditions are satisfied.
- **NOT:** If a NOT operator is used in WHERE Clause with a condition, the query will return true only if the table records does not satisfy the condition.

Fetching Data Using Where Clause

The WHERE clause is very useful when you want to fetch the selected rows from a table, especially when you use the **MySQL Join**. Joins are discussed in another chapter.

If the given condition does not match any record in the table, then the query would not return any row.

Syntax

Following is the generic SQL syntax of the SELECT command with the WHERE clause to fetch data from the MySQL table –

```
SELECT field1, field2,...fieldN table_name1, table_name2...

[WHERE condition1 [AND [OR]] condition2.....
```

- You can use one or more tables separated by a comma to include various conditions using a WHERE clause, but the WHERE clause is an optional part of the SELECT command.
- You can specify any condition using the WHERE clause.
- You can specify more than one condition using the **AND** or the **OR** operators.
- A WHERE clause can be used along with DELETE or UPDATE SQL command also to specify a condition.

Example

Firstly, let us create a table named **CUSTOMERS** using the following query –

```
CREATE TABLE CUSTOMERS (
   ID INT NOT NULL,
   NAME VARCHAR (20) NOT NULL,
   AGE INT NOT NULL,
   ADDRESS CHAR (25),
   SALARY DECIMAL (18, 2),
   PRIMARY KEY (ID)
);
```

```
INSERT INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY) VALUES
(1, 'Ramesh', 32, 'Ahmedabad', 2000.00 ),
(2, 'Khilan', 25, 'Delhi', 1500.00 ),
(3, 'Kaushik', 23, 'Kota', 2000.00 ),
(4, 'Chaitali', 25, 'Mumbai', 6500.00 ),
(5, 'Hardik', 27, 'Bhopal', 8500.00 ),
(6, 'Komal', 22, 'Hyderabad', 4500.00 ),
(7, 'Muffy', 24, 'Indore', 10000.00 );
```

```
Select * From CUSTOMERS;
```

Now, let us fetch the CUSTOMERS whose AGE is greater than 23 using the MySQL WHERE clause in conjunction with SELECT statement –

```
Select * From CUSTOMERS Where AGE > 23;
```