POSTGRESQL - AND AND OR CONJUNCTIVE OPERATORS

The PostgreSQL **AND** and **OR** operators are used to combine multiple conditions to narrow down selected data in a PostgreSQL statement. These two operators are called conjunctive operators.

These operators provide a means to make multiple comparisons with different operators in the same PostgreSQL statement.

The AND Operator:

The **AND** operator allows the existence of multiple conditions in a PostgreSQL statement's WHERE clause. While using AND operator, complete condition will be assumed true when all the conditions are true. For example [condition1] AND [condition2] will be true only when both condition1 and condition2 are true.

Syntax:

The basic syntax of AND operator with WHERE clause is as follows:

```
SELECT column1, column2, columnN
FROM table_name
WHERE [condition1] AND [condition2]...AND [conditionN];
```

You can combine N number of conditions using AND operator. For an action to be taken by the PostgreSQL statement, whether it be a transaction or query, all conditions separated by the AND must be TRUE.

Example:

Consider the table COMPANY having records as follows:

```
testdb# select * from COMPANY;
 id | name  | age | address    | salary
----+-------+-----+------------+--------
  1 | Paul  | 32  | California | 20000
  2 | Allen | 25  | Texas      | 15000
  3 | Teddy | 23  | Norway     | 20000
  4 | Mark  | 25  | Rich-Mond  | 65000
  5 | David | 27  | Texas      | 85000
  6 | Kim   | 22  | South-Hall | 45000
  7 | James | 24  | Houston    | 10000
(7 rows)
```

Following SELECT statement lists down all the records where AGE is greater than or equal to 25 **AND** salary is greater than or equal to 65000.00:

```
testdb=# SELECT * FROM COMPANY WHERE AGE >= 25 AND SALARY >= 65000;
```

Above PostgreSQL statement will produce the following result:

```
 id | name  | age | address    | salary
----+-------+-----+------------+--------
  4 | Mark  | 25  | Rich-Mond  | 65000
  5 | David | 27  | Texas      | 85000
(2 rows)
```

The OR Operator:

The OR operator is also used to combine multiple conditions in a PostgreSQL statement's WHERE clause. While using OR operator, complete condition will be assumed true when atleast any of the conditions is true. For example [condition1] OR [condition2] will be true if either condition1 or condition2 is true.

Syntax:

The basic syntax of OR operator with WHERE clause is as follows:

```
SELECT column1, column2, columnN
FROM table_name
WHERE [condition1] OR [condition2]...OR [conditionN]
```

You can combine N number of conditions using OR operator. For an action to be taken by the PostgreSQL statement, whether it be a transaction or query, only any ONE of the conditions separated by the OR must be TRUE.

Example:

Consider COMPANY table is having the following records:

```
# select * from COMPANY;
 id | name  | age | address   | salary
----+-------+-----+-----------+--------
  1 | Paul  |  32 | California|  20000
  2 | Allen |  25 | Texas     |  15000
  3 | Teddy |  23 | Norway    |  20000
  4 | Mark  |  25 | Rich-Mond |  65000
  5 | David |  27 | Texas     |  85000
  6 | Kim   |  22 | South-Hall|  45000
  7 | James |  24 | Houston   |  10000
(7 rows)
```

Following SELECT statement lists down all the records where AGE is greater than or equal to 25 **OR** salary is greater than or equal to 65000.00:

```
testdb=# SELECT * FROM COMPANY WHERE AGE >= 25 OR SALARY >= 65000;
```

Above PostgreSQL statement will produce the following result:

```
 id | name  | age | address    | salary
----+-------+-----+------------+--------
  1 | Paul  |  32 | California |  20000
  2 | Allen |  25 | Texas      |  15000
  4 | Mark  |  25 | Rich-Mond  |  65000
  5 | David |  27 | Texas      |  85000
(4 rows)
```