PostgreSQL - LIKE Clause

The PostgreSQL **LIKE** operator is used to match text values against a pattern using wildcards. If the search expression can be matched to the pattern expression, the LIKE operator will return true, which is **1**.

There are two wildcards used in conjunction with the LIKE operator -

- The percent sign (%)
- The underscore ()

The percent sign represents zero, one, or multiple numbers or characters. The underscore represents a single number or character. These symbols can be used in combinations.

If either of these two signs is not used in conjunction with the LIKE clause, then the LIKE acts like the equals operator.

Syntax

The basic syntax of % and is as follows -

```
SELECT FROM table_name
WHERE column LIKE 'XXXXX'

Or

SELECT FROM table_name
WHERE column LIKE '%XXXXX'

Or

SELECT FROM table_name
WHERE column LIKE 'XXXX_'

Or

SELECT FROM table_name
WHERE column LIKE '_XXXX'

Or

SELECT FROM table_name
WHERE column LIKE '_XXXX'
```

You can combine N number of conditions using AND or OR operators. Here XXXX could be any numeric or string value.

Example

Here are number of examples showing WHERE part having different LIKE clause with '%' and '_' operators -

S. No.	Statement & Description
1	WHERE SALARY::text LIKE '200%' Finds any values that start with 200
2	WHERE SALARY::text LIKE '%200%' Finds any values that have 200 in any position
3	WHERE SALARY::text LIKE '_00%' Finds any values that have 00 in the second and third positions
4	WHERE SALARY::text LIKE '2_%_%' Finds any values that start with 2 and are at least 3 characters in length
5	WHERE SALARY::text LIKE '%2' Finds any values that end with 2
6	WHERE SALARY::text LIKE '_2%3' Finds any values that have 2 in the second position and end with a 3
7	WHERE SALARY::text LIKE '23' Finds any values in a five-digit number that start with 2 and end with 3

Postgres LIKE is String compare only. Hence, we need to explicitly cast the integer column to string as in the examples above.

Let us take a real example, consider the table COMPANY , having records as follows -

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

The following is an example, which would display all the records from COMPANY table where AGE starts with 2 -

```
testdb=# SELECT * FROM COMPANY WHERE AGE::text LIKE '2%';
```

This would produce the following result -

```
id name
          age address
                            salary
 2 | Allen | 25 | Texas
                               15000
 3 | Teddy | 23 | Norway
                               20000
4 | Mark | 25 | Rich-Mond
                            65000
 5 | David | 27 | Texas
                               85000
         | 22 | South-Hall | 45000
 6 | Kim
 7 | James | 24 | Houston
                               10000
 8 | Paul | 24 | Houston
                               20000
(7 rows)
```

The following is an example, which would display all the records from COMPANY table where ADDRESS will have a hyphen (-) inside the text -

```
testdb=# SELECT * FROM COMPANY WHERE ADDRESS LIKE '%-%';
```

This would produce the following result -