

SQL - Wildcard Operators

We have already discussed about the SQL LIKE operator, which is used to compare a value to similar values using the wildcard operators.

SQL supports two wildcard operators in conjunction with the LIKE operator which are explained in detail in the following table.

Sr.No.	Wildcard & Description
1	The percent sign (%) Matches one or more characters. Note – MS Access uses the asterisk (*) wildcard character instead of the percent sign (%) wildcard character.
2	The underscore (_) Matches one character. Note – MS Access uses a question mark (?) instead of the underscore (_) to match any one character.

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

Syntax

The basic syntax of a '%' and a '_' operator is as follows.

```
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_'

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 the AND or the OR operators. Here, XXXX could be any numeric or string value.

Example

The following table has a number of examples showing the WHERE part having different LIKE clauses with '%' and '_' operators.

Sr.No.	Statement & Description
1	WHERE SALARY LIKE '200%' Finds any values that start with 200.
2	WHERE SALARY LIKE '%200%' Finds any values that have 200 in any position.
3	WHERE SALARY LIKE '_00%' Finds any values that have 00 in the second and third positions.
4	WHERE SALARY LIKE '2_%_ %' Finds any values that start with 2 and are at least 3 characters in length.
5	WHERE SALARY LIKE '%2' Finds any values that end with 2.
6	WHERE SALARY LIKE '_2%3' Finds any values that have a 2 in the second position and end with a 3.
7	WHERE SALARY LIKE '2___3' Finds any values in a five-digit number that start with 2 and end with 3.

Let us take a real example, consider the CUSTOMERS table having the following records.

ID	NAME	AGE	ADDRESS	SALARY
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	MP	4500.00
7	Muffy	24	Indore	10000.00

The following code block is an example, which would display all the records from the CUSTOMERS table where the SALARY starts with 200.

```
SQL> SELECT * FROM CUSTOMERS  
WHERE SALARY LIKE '200%';
```

This would produce the following result.

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
3	kaushik	23	Kota	2000.00