

The SQL LIKE Operator

The **LIKE** operator is used in a **WHERE** clause to search for a specified pattern in a column.

There are two wildcards often used in conjunction with the **LIKE** operator:

- The percent sign **%** represents zero, one, or multiple characters
- The underscore sign **_** represents one, single character

Example

Select all customers that starts with the letter "a":

```
SELECT * FROM Customers
WHERE CustomerName LIKE 'a%';
```

Syntax

```
SELECT column1, column2, ...
FROM table_name
WHERE columnN LIKE pattern;
```

Example

Return all customers that starts with 'a' or starts with 'b':

```
SELECT * FROM Customers
WHERE CustomerName LIKE 'a%' OR CustomerName LIKE 'b%';
```

SQL Wildcard Characters

A wildcard character is used to substitute one or more characters in a string.

Wildcard characters are used with the **LIKE** operator. The **LIKE** operator is used in a **WHERE** clause to search for a specified pattern in a column.

Wildcard Characters

Symbol	Description
%	Represents zero or more characters
_	Represents a single character
[]	Represents any single character within the brackets *
^	Represents any character not in the brackets *
-	Represents any single character within the specified range *
{ }	Represents any escaped character **

* Not supported in PostgreSQL and MySQL databases.

** Supported only in Oracle databases.

Difference Between LIKE and Wildcard in SQL

Feature	LIKE Operator	Wildcards (% , _)
Definition	Used for pattern matching in SQL queries.	Special characters used with LIKE to define patterns.
Usage	LIKE is the operator that allows searching for a specific pattern in a column.	Wildcards are used within LIKE to represent unknown characters.
Functionality	Works with CHAR , VARCHAR , TEXT , and similar string data types.	Helps in creating flexible search patterns within LIKE .
Examples	WHERE Name LIKE 'A%'	% (any number of characters), _ (single character)

Understanding LIKE with Wildcards

✔ The LIKE operator must be used with wildcards to perform pattern-based searches.

Common Wildcards Used with LIKE

Wildcard	Description	Example
%	Represents zero, one, or many characters.	LIKE 'A%' (Finds all names starting with 'A')
_	Represents a single character.	LIKE 'A_' (Finds all 2-letter names starting with 'A')
[]	Matches any single character within the brackets.	LIKE 'B[aeiou]g' (Finds Bag , Beg , etc.)
[^]	Excludes characters inside brackets.	LIKE 'B[^aeiou]g' (Finds Bzg , Btg , etc., but not Bag or Beg)

Difference Between LIKE and Wildcards in SQL (Column-wise Example)

Concept	Example Query	Explanation	Matches
LIKE with %	WHERE Name LIKE 'A%'	Finds names starting with "A"	Alice , Adam , Alex
LIKE with _	WHERE Name LIKE 'J_hn'	Finds names where the second letter is any single character	John , Jahn , Juhn
LIKE with []	WHERE Name LIKE '[AB]%'	Finds names starting with "A" or "B"	Alice , Bob
LIKE with [^]	WHERE Name LIKE '[^J]%'	Finds names NOT starting with "J"	Alice , Bob , but not John