

Wildcard Operators

Wildcard operators are used with the LIKE operator, which is generally used to search the data in the database and there are four basic operators %, _, -, [range_of_characters]. Let us explain all these operators in brief.

Operator Table

Operator	Description
%	It is used in place of zero or more characters.
_	It is used as a substitute for one character.
-	It is used to substitute a range of characters.
[range_of_characters]	It is used to fetch a matching set or range of characters specified inside the brackets.

Syntax

```
SELECT column1, column2
FROM table_name
WHERE column LIKE wildcard_operator;
```

Parameters

- **column1, column2** – Fields in the table.
- **table_name** – Name of the table.
- **column** – Name of the field used for filtering data.

CREATE Table Customer

```
CREATE TABLE Customer(
  CustomerID INT PRIMARY KEY,
  CustomerName VARCHAR(50),
  LastName VARCHAR(50),
  Country VARCHAR(50),
  Age INT(2),
  Phone INT(10)
);
-- Insert some sample data into the Customers table
INSERT INTO Customer
VALUES
(1, 'Shubham', 'Thakur', 'India', '23', '9125368745'),
(2, 'Aman ', 'Chopra', 'Australia', '21', '9632784152'),
(3, 'Naveen', 'Tulasi', 'Sri lanka', '24', '8965741538'),
(4, 'Aditya', 'Arpan', 'Austria', '21', '9874589736'),
(5, 'Nishant. Salchichas S.A.', 'Jain', 'Spain', '22', '8754128965');
```

```
SELECT *  
FROM Customer;
```

Output

CustomerID	CustomerName	LastName	Country	Age	Phone
1	Shubham	Thakur	India	23	9125368745
2	Aman	Chopra	Australia	21	9632784152
3	Naveen	Tulasi	Sri Lanka	24	8965741538
4	Aditya	Arpan	Austria	21	9874589736
5	Nishant. Salchichas S.A.	Jain	Spain	22	8754128965

Customer Table

Using the % Wildcard

1. To fetch records from the Customer table with NAME starting with the letter 'A'.

Query

```
SELECT *  
FROM Customer  
WHERE CustomerName  
LIKE 'A%';
```

Output

CustomerID	CustomerName	LastName	Country	Age	Phone
2	Aman	Chopra	Australia	21	9632784152
4	Aditya	Arpan	Austria	21	9874589736

Table - 1

2. To fetch records from the Customer table with NAME ending with the letter 'A'.

Query

```
SELECT *  
FROM Customer  
WHERE CustomerName  
LIKE '%A';
```

Output

CustomerID	CustomerName	LastName	Country	Age	Phone
4	Aditya	Arpan	Austria	21	xxxxxxxxxx

Table – 2

3. To fetch records from the Customer table with NAME with the letter ‘A’ at any position.

Query

```
SELECT *
FROM Customer
WHERE CustomerName
LIKE '%A%';
```

Output

CustomerID	CustomerName	LastName	Country	Age	Phone
1	Shubham	Thakur	India	23	9125368745
2	Aman	Chopra	Australia	21	9632784152
3	Naveen	Tulasi	Sri lanka	24	8965741538
4	Aditya	Arpan	Austria	21	9874589736
5	Nishant. Salchichas S.A.	Jain	Spain	22	8754128965

Table – 3

4. To fetch records from the Customer table the LastName containing ‘ra’ at any position, and the result set should not contain duplicate data.

Query

```
SELECT DISTINCT *
FROM Customer
WHERE Country
LIKE '%ra%';
```

Output

CustomerID	CustomerName	LastName	Country	Age	Phone
2	Aman	Chopra	Australia	21	9632784152

Table – 4

Using the _ Wildcard

1. To fetch records from the Customer table with NAME ending any letter but starting from 'Nav'.

Query

```
SELECT *  
FROM Customer  
WHERE CustomerName  
LIKE 'Nav____';
```

Output

CustomerID	CustomerName	LastName	Country	Age	Phone
3	Naveen	Tulasi	Sri lanka	24	8965741538

Table – 5

2. To fetch records from the Customer table with Country containing a total of 7 characters.

Query

```
SELECT *  
FROM Customer  
WHERE Country  
LIKE '____';
```

Output

CustomerID	CustomerName	LastName	Country	Age	Phone
4	Aditya	Arpan	Austria	21	9874589736

Table – 6

Using the [Charlist] Wildcard

1. To fetch records from the Customer table with LastName containing letters 'a', 'b', or 'c'.

Query

```
SELECT *  
FROM Customer  
WHERE LastName  
REGEXP '[A-C]';
```

Output

CustomerID	CustomerName	LastName	Country	Age	Phone
1	Shubham Thakur	India	23	862357843	
2	Aman Chopra	Australia	21	436577545	
3	Naveen Tulasi	Sri lanka	24	234565663	
4	Aditya Arpan	Austria	21	234565676	
5	Nishant. Salchichas S.A.	Jain	Spain	22	234567346

Table – 7

2. To fetch records from the Customer table with LastName not containing letters 'y', or 'z'.

Query

```
SELECT *  
FROM Students  
WHERE LastName  
NOT LIKE '%[y-z]%';
```

Output

CustomerID	CustomerName	LastName	Country	Age	Phone
1	Shubham	Thakur	India	23	9125368745
2	Aman	Chopra	Australia	21	9632784152
3	Naveen	Tulasi	Sri lanka	24	8965741538
4	Aditya	Arpan	Austria	21	9874589736
5	Nishant. Salchichas S.A.	Jain	Spain	22	8754128965

Table – 8

Using Both % and _ Wildcard

1. To fetch records from the Student table with the PHONE field having an '8' in the 1st position and a '3' in the 3rd position.

Query

```
SELECT *  
FROM Student  
WHERE PHONE  
LIKE '8__3%';
```

Output

CustomerID	CustomerName	LastName	Country	Age	Phone
3	Naveen	Tulasi	Sri lanka	24	8965741538

Table – 9

FAQs on WildCard Operator

What is a wildcard operator in SQL?

The LIKE operator makes use of wildcard characters. The LIKE operator is used in a WHERE clause to look for a specific pattern in a column.