# **SQL LIKE Operator**

**SQL LIKE Operator:**

1. The LIKE operator is used in a WHERE clause to search for a specified pattern in a column.
2. 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
3. Example:  
   Select all customers that starts with the letter "a":

|  |
| --- |
| SELECT \* FROM Customers  WHERE CustomerName LIKE 'a%'; |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CustomerID** | **CustomerName** | **ContactName** | **Address** | **City** | **PostalCode** | **Country** |
| 1 | Alfreds Futterkiste | Maria Anders | Obere Str. 57 | Berlin | 12209 | Germany |
| 2 | Ana Trujillo Emparedados y helados | Ana Trujillo | Avda. de la Constitución 2222 | México D.F. | 05021 | Mexico |
| 3 | Antonio Moreno Taquería | Antonio Moreno | Mataderos 2312 | México D.F. | 05023 | Mexico |
| 4 | Around the Horn | Thomas Hardy | 120 Hanover Sq. | London | WA1 1DP | UK |

1. The syntax:

|  |
| --- |
| SELECT column1, column2, ...  FROM table\_name  WHERE columnN LIKE pattern; |

**The \_ Wildcard:**

1. The \_ wildcard represents a single character.
2. It can be any character or number, but each \_ represents one, and only one, character.
3. Example:  
   Return all customers from a city that starts with 'L' followed by one wildcard character, then 'nd' and then two wildcard characters:

|  |
| --- |
| SELECT \* FROM Customers  WHERE city LIKE 'L\_nd\_\_'; |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CustomerID** | **CustomerName** | **ContactName** | **Address** | **City** | **PostalCode** | **Country** |
| 4 | Around the Horn | Thomas Hardy | 120 Hanover Sq. | London | WA1 1DP | UK |
| 11 | B's Beverages | Victoria Ashworth | Fauntleroy Circus | London | EC2 5NT | UK |
| 16 | Consolidated Holdings | Elizabeth Brown | Berkeley Gardens 12 Brewery | London | WX1 6LT | UK |
| 19 | Eastern Connection | Ann Devon | 35 King George | London | WX3 6FW | UK |
| 53 | North/South | Simon Crowther | South House 300 Queensbridge | London | SW7 1RZ | UK |
| 72 | Seven Seas Imports | Hari Kumar | 90 Wadhurst Rd. | London | OX15 4NB | UK |
| 75 | Split Rail Beer & Ale | Art Braunschweiger | P.O. Box 555 | Lander | 82520 | USA |

**Starts With:**

1. To return records that starts with a specific letter or phrase, add the % at the end of the letter or phrase.
2. Example:  
   Return all customers that starts with 'La':

|  |
| --- |
| SELECT \* FROM Customers  WHERE CustomerName LIKE 'La%'; |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CustomerID** | **CustomerName** | **ContactName** | **Address** | **City** | **PostalCode** | **Country** |
| 40 | La corne d'abondance | Daniel Tonini | 67, avenue de l'Europe | Versailles | 78000 | France |
| 41 | La maison d'Asie | Annette Roulet | 1 rue Alsace-Lorraine | Toulouse | 31000 | France |
| 42 | Laughing Bacchus Wine Cellars | Yoshi Tannamuri | 1900 Oak St. | Vancouver | V3F 2K1 | Canada |
| 43 | Lazy K Kountry Store | John Steel | 12 Orchestra Terrace | Walla Walla | 99362 | USA |

You can also combine any number of conditions using AND or OR operators.

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

|  |
| --- |
| SELECT \* FROM Customers  WHERE CustomerName LIKE 'a%' OR CustomerName LIKE 'b%'; |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CustomerID** | **CustomerName** | **ContactName** | **Address** | **City** | **PostalCode** | **Country** |
| 1 | Alfreds Futterkiste | Maria Anders | Obere Str. 57 | Berlin | 12209 | Germany |
| 2 | Ana Trujillo Emparedados y helados | Ana Trujillo | Avda. de la Constitución 2222 | México D.F. | 05021 | Mexico |
| 3 | Antonio Moreno Taquería | Antonio Moreno | Mataderos 2312 | México D.F. | 05023 | Mexico |
| 4 | Around the Horn | Thomas Hardy | 120 Hanover Sq. | London | WA1 1DP | UK |
| 5 | Berglunds snabbköp | Christina Berglund | Berguvsvägen 8 | Luleå | S-958 22 | Sweden |

**Ends With:**

1. To return records that ends with a specific letter or phrase, add the % at the beginning of the letter or phrase.
2. Example:

|  |
| --- |
| SELECT \* FROM Customers  WHERE CustomerName LIKE '%a'; |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CustomerID** | **CustomerName** | **ContactName** | **Address** | **City** | **PostalCode** | **Country** |
| 3 | Antonio Moreno Taquería | Antonio Moreno | Mataderos 2312 | México D.F. | 05023 | Mexico |
| 13 | Centro comercial Moctezuma | Francisco Chang | Sierras de Granada 9993 | México D.F. | 05022 | Mexico |
| 30 | Godos Cocina Típica | José Pedro Freyre | C/ Romero, 33 | Sevilla | 41101 | Spain |
| 61 | Que Delícia | Bernardo Batista | Rua da Panificadora, 12 | Rio de Janeiro | 02389-673 | Brazil |

You can also combine "starts with" and "ends with":  
  
Example:  
Return all customers that starts with "b" and ends with "s":

|  |
| --- |
| SELECT \* FROM Customers  WHERE CustomerName LIKE 'b%s'; |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CustomerID** | **CustomerName** | **ContactName** | **Address** | **City** | **PostalCode** | **Country** |
| 7 | Blondel père et fils | Frédérique Citeaux | 24, place Kléber | Strasbourg | 67000 | France |
| 8 | Bólido Comidas preparadas | Martín Sommer | C/ Araquil, 67 | Madrid | 28023 | Spain |
| 11 | B's Beverages | Victoria Ashworth | Fauntleroy Circus | London | EC2 5NT | UK |

**Contains:**

1. To return records that contains a specific letter or phrase, add the % both before and after the letter or phrase.
2. Example:  
   Return all customers that contains the phrase 'or'

|  |
| --- |
| SELECT \* FROM Customers  WHERE CustomerName LIKE '%or%' |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CustomerID** | **CustomerName** | **ContactName** | **Address** | **City** | **PostalCode** | **Country** |
| 3 | Antonio Moreno Taquería | Antonio Moreno | Mataderos 2312 | México D.F. | 05023 | Mexico |
| 4 | Around the Horn | Thomas Hardy | 120 Hanover Sq. | London | WA1 1DP | UK |
| 36 | Hungry Coyote Import Store | Yoshi Latimer | City Center Plaza 516 Main St. | Elgin | 97827 | USA |
| 40 | La corne d'abondance | Daniel Tonini | 67, avenue de l'Europe | Versailles | 78000 | France |

**Combine Wildcards:**

1. Any wildcard, like % and \_ , can be used in combination with other wildcards.
2. Example:  
   Return all customers that starts with "a" and are at least 3 characters in length:

|  |
| --- |
| SELECT \* FROM Customers  WHERE CustomerName LIKE 'a\_\_%'; |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CustomerID** | **CustomerName** | **ContactName** | **Address** | **City** | **PostalCode** | **Country** |
| 1 | Alfreds Futterkiste | Maria Anders | Obere Str. 57 | Berlin | 12209 | Germany |
| 2 | Ana Trujillo Emparedados y helados | Ana Trujillo | Avda. de la Constitución 2222 | México D.F. | 05021 | Mexico |
| 3 | Antonio Moreno Taquería | Antonio Moreno | Mataderos 2312 | México D.F. | 05023 | Mexico |
| 4 | Around the Horn | Thomas Hardy | 120 Hanover Sq. | London | WA1 1DP | UK |

Example:

Return all customers that have "r" in the second position:

|  |
| --- |
| SELECT \* FROM Customers  WHERE CustomerName LIKE '\_r%'; |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CustomerID** | **CustomerName** | **ContactName** | **Address** | **City** | **PostalCode** | **Country** |
| 4 | Around the Horn | Thomas Hardy | 120 Hanover Sq. | London | WA1 1DP | UK |
| 17 | Drachenblut Delikatessend | Sven Ottlieb | Walserweg 21 | Aachen | 52066 | Germany |
| 20 | Ernst Handel | Roland Mendel | Kirchgasse 6 | Graz | 8010 | Austria |
| 25 | Frankenversand | Peter Franken | Berliner Platz 43 | München | 80805 | Germany |

**Without Wildcard:**

1. If no wildcard is specified, the phrase has to have an exact match to return a result.
2. Example:  
   Return all customers from Spain:

|  |
| --- |
| SELECT \* FROM Customers  WHERE Country LIKE 'Spain'; |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CustomerID** | **CustomerName** | **ContactName** | **Address** | **City** | **PostalCode** | **Country** |
| 8 | Bólido Comidas preparadas | Martín Sommer | C/ Araquil, 67 | Madrid | 28023 | Spain |
| 22 | FISSA Fabrica Inter. Salchichas S.A. | Diego Roel | C/ Moralzarzal, 86 | Madrid | 28034 | Spain |
| 29 | Galería del gastrónomo | Eduardo Saavedra | Rambla de Cataluña, 23 | Barcelona | 08022 | Spain |