

LTRIM() Function

The **SQL LTRIM function** removes the leading space from the left of a string or string expression.

LTRIM() Function in SQL

The LTRIM() function in SQL is an inbuilt string function that is used to remove the **leading empty spaces** from the left side of our data. The LTRIM function can also be used to remove a specific character or substring from the left side of the string.

The **LTRIM function** is primarily used for data cleaning purposes where the data administrator uses this function to remove unnecessary characters from the database in one go.

Syntax

SQL LTRIM function syntax is:

```
LTRIM(Input_String, [Trim_Characters])
```

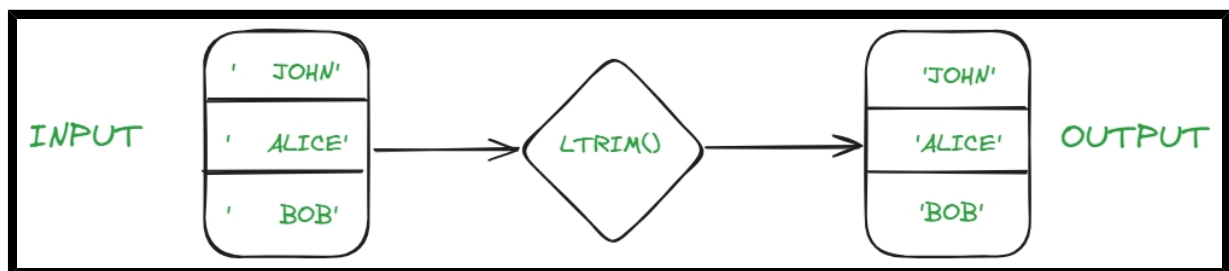
Parameters

- **Input_String:** String from which you want to remove leading spaces.
- **Trim_Characters:** [optional] specified characters you want to remove.

Note: If we don't specify any characters to remove, the LTRIM function removes the white spaces for **data cleaning** and **manipulation** in SQL.

SQL LTRIM function Working

The following diagram shows how the **SQL LTRIM function** affects strings in the table.



Workflow of LTRIM function

The function LTRIM in SQL analyzes the input string from the left side and removes any empty spaces or the mentioned character found on that string. The function does not alter the original string, it returns a new string where the leading whitespaces are removed.

This function doesn't deal with whitespaces present between the strings. For example if the string 'JOHN' was written as 'JO HN' then only the leading white spaces on the left side will be removed by this function and the spaces in between will remain as they were earlier.

SQL LTRIM Function Examples

Now let us see some examples of LTRIM function in different use cases to understand it's working better:

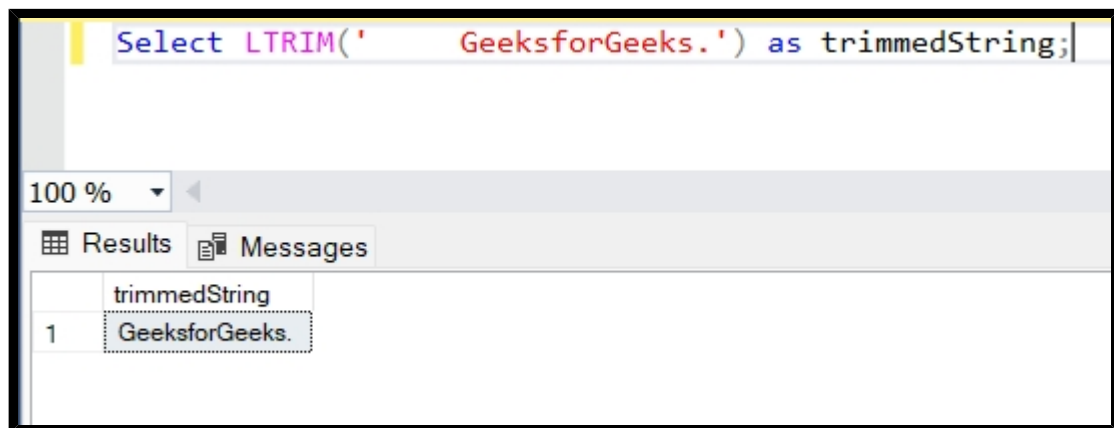
Remove Leading White Spaces Using LTRIM function Example

In this example, we will remove the leading white spaces from a string using SQL LTRIM function.

Query

```
SELECT LTRIM('  GeeksforGeeks.') AS trimmedString;
```

Output



The screenshot shows a SQL query editor with the query: `Select LTRIM(' GeeksforGeeks.') as trimmedString;`. Below the editor, the 'Results' tab is active, displaying a table with one row. The column is named 'trimmedString' and the value is 'GeeksforGeeks.'.

	trimmedString
1	GeeksforGeeks.

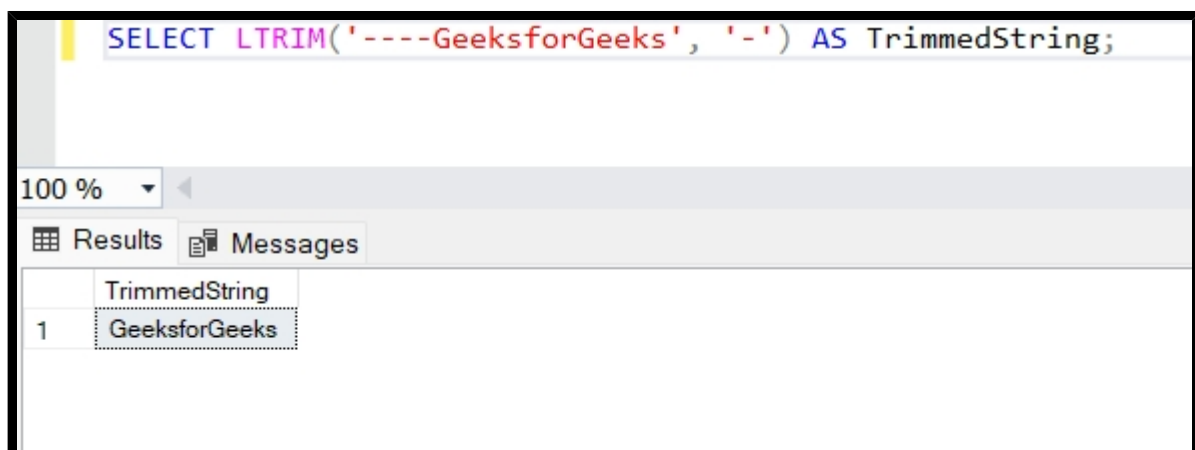
Output

Remove Specific Characters Using LTRIM function Example

In this example, we will remove specific characters using LTRIM function.

```
SELECT LTRIM('----GeeksforGeeks', '-') AS TrimmedString;
```

Output



The screenshot shows a SQL query editor with the query: `SELECT LTRIM('----GeeksforGeeks', '-') AS TrimmedString;`. Below the editor, the 'Results' tab is active, displaying a table with one row. The column is named 'TrimmedString' and the value is 'GeeksforGeeks'.

	TrimmedString
1	GeeksforGeeks

Output

Remove a Substring from a String Using LTRIM function

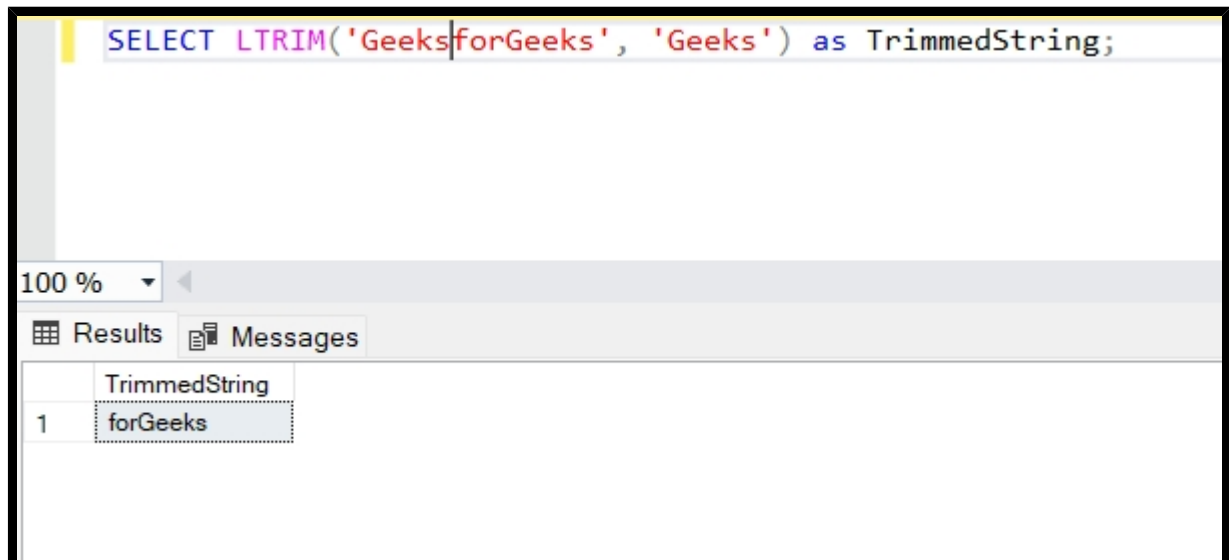
Example

In this example, we will remove a substring from a string using the LTRIM function.

Query

```
SELECT LTRIM('GeeksforGeeks', 'Geeks') AS TrimmedString;
```

Output



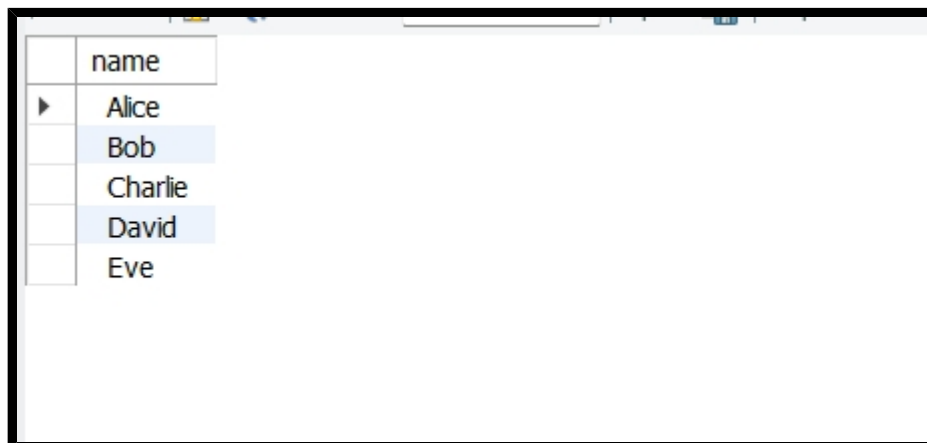
The screenshot shows a SQL query editor with the query `SELECT LTRIM('GeeksforGeeks', 'Geeks') as TrimmedString;`. Below the query, there are tabs for 'Results' and 'Messages'. The 'Results' tab is active, displaying a table with one column named 'TrimmedString' and one row with the value 'forGeeks'.

	TrimmedString
1	forGeeks

Output

Use LTRIM on a Table Column Example

Let us consider the following table where the names of the users are stored with whitespaces. If we want to remove these whitespaces then we can use the LTRIM in SQL to remove them in one go.



The screenshot shows a table with a single column named 'name'. The table contains five rows with the following values: Alice, Bob, Charlie, David, and Eve.

name
Alice
Bob
Charlie
David
Eve

Input Table

To create this table, write the following SQL query:

```
CREATE TABLE Names (  
    Name VARCHAR(45)  
);  
INSERT INTO Names (Name) VALUES  
(' Alice'),  
(' Bob'),
```

```
(' Charlie'),  
( ' David'),  
( ' Eve');
```

Now to remove whitespace from this column, we can use the SQL query:

```
SELECT LTRIM(name) FROM users AS TrimmedNames;
```

Output

	LTRIM(name)
▶	Alice
	Bob
	Charlie
	David
	Eve

Output Table

After executing the LTRIM function on the column of the above table, you can observe that the leading whitespaces are removed in one go from all the records of the table.

Important Points About SQL LTRIM Function

- **SQL LTRIM** is useful inbuilt function which can be used to remove the whitespaces on left our data in the databases.
- Not only whitespaces it can also remove a specific character or a subtring from the data.
- LTRIM function in SQL can be used on entire column/field of table to remove whitespace.
- LTRIM function only works for the left side of data, and will not affect the middle or right side of data.