

LEN

LEN function returns the length of the specified string, expressed as the number of characters.

Syntax

`len(string)`



LEN

LEN function returns the length of the specified string, expressed as the number of characters.

Example

```
SELECT Customer_name, Len(Customer_name) as characters  
FROM customer  
WHERE age >30;  
GO
```



UPPER & LOWER

UPPER/ LOWER function converts all characters in the specified string to uppercase/ lowercase.

Syntax

`upper(string)`

`lower(string)`



UPPER & LOWER

UPPER/ LOWER function converts all characters in the specified string to uppercase/ lowercase.

Example

```
SELECT upper('Start-Tech Academy');
```

```
GO
```

```
SELECT lower('Start-Tech Academy');
```

```
GO
```



REPLACE

REPLACE function replaces all occurrences of a specified string

Syntax

`replace(string, from_substring, to_substring)`

Replace function is case sensitive.



REPLACE

REPLACE function replaces all occurrences of a specified string

Example

```
SELECT
    customer_name,
    country,
    Replace(country,'United States','US') as Country_new
FROM customer;
GO
```



TRIM,LTRIM & RTRIM

TRIM function removes all specified characters either from the beginning or the end of a string

RTRIM function removes all specified characters from the right-hand side of a string

LTRIM function removes all specified characters from the left-hand side of a string

Syntax

```
trim( [ leading | trailing | both ] [ trim_character ] from string )
```

```
rtrim( string, trim_character )
```

```
ltrim( string, trim_character )
```

By default, the TRIM function removes the space character from both the start and the end of the string.

To enable the optional LEADING, TRAILING, or BOTH positional arguments you must enable database compatibility level 160 on the database(s) that you are connecting to when executing queries.

Compatibility level 160 can only be achieved in sql server 2022



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LTRIM function removes all specified characters from the left-hand side of a string

Example

```
SELECT trim (' Start-Tech Academy ');
```

```
GO
```

```
SELECT rtrim(' Start-Tech Academy ');
```

```
GO
```

```
SELECT ltrim(' Start-Tech Academy ');
```

```
GO
```



CONCAT

CONCAT operator allows you to concatenate 2 or more strings together

Syntax

```
CONCAT( string1, string2, string3);  
GO
```



CONCAT

CONCAT operator allows you to concatenate 2 or more strings together

Example

```
SELECT
    Customer_name,
    CONCAT(city, ' ', 'state', ' ', 'country) AS address
FROM customer;
GO
```



SUBSTRING

SUBSTRING function allows you to extract a substring from a string.

Syntax

`substring(string ,[start_position] ,[length])`



SUBSTRING

SUBSTRING function allows you to extract a substring from a string.

Example

```
SELECT
    Customer_id,
    Customer_name,
    SUBSTRING (Customer_id,1, 2) AS cust_group
FROM customer
WHERE SUBSTRING(Customer_id,1, 2) = 'AB';
GO
SELECT
    Customer_id,
    Customer_name,
    SUBSTRING (Customer_id, 4, 5) AS cust_number
FROM customer
WHERE SUBSTRING(Customer_id,1, 2) = 'AB';
GO
```



STRING AGGREGATOR

STRING_AGG concatenates input values into a string, separated by delimiter

Syntax

`string_agg (expression, delimiter)`



STRING AGGREGATOR

STRING_AGG concatenates input values into a string, separated by delimiter

Example

```
SELECT
    order_id ,
    STRING_AGG (product_id,', ')
FROM sales
GROUP BY order_id;
```

