

ROUND function in SQL Server

The article will give you detailed instructions on how to use the SQL Server ROUND () function with the syntax and specific examples to make it easier to visualize and capture the function better.

This article will show you in detail how to use the SQL Server ROUND () function with syntax and examples to better visualize and capture functions better.

Describe

The **ROUND function** in SQL Server is used to round numbers to a certain decimal place.

Syntax

To use the ROUND function in SQL Server, we use the following syntax:

```
ROUND(number, decimal, operation)
```

Parameters :

1. *number*: number passed to round
2. *Decimal* : *The* number of decimal places is rounded to. This value must be a positive or negative integer. If this parameter is omitted, the ROUND function will round the number to 0 decimal places.
3. *operation*: parameter not required. The operation can be any other numeric value. When it is 0 (or omitted), the ROUND function will round the result into a decimal. If the operation is any value other than 0, the ROUND function will cut the result into a decimal.

Principle of rounding :

When you round the number, the system will check the number in position (decimal + 1):

1. If the number is greater than 4, the number in the decimal position will add 1. The numbers at the back become 0
2. If the number is less than 5, the number in the decimal position will remain the same. The numbers on the back become 0

For example we have a decimal number of 423.3241

Số	4	2	3	.	3	2	4	1
Vị trí làm tròn	-2	-1		0	1	2	3	4

1. SELECT ROUND (423.3241, -2) has a result of 400.0000
2. SELECT ROUND (423.3241, -1) has a result of 420.0000
3. SELECT ROUND (423.3241, 0) has a result of 423.0000
4. SELECT ROUND (423.3241, 1) has a result of 423.3000
5. SELECT ROUND (423.3241, 2) has a result of 423.3200
6. SELECT ROUND (423.3241, 3) has a result of 423.3240
7. SELECT ROUND (423.3241, 4) has a result of 423.3241

Note :

1. See also CEILING and FLOOR functions.
2. ROUND function can be used in later versions of SQL Server: SQL Server 2017, SQL Server 2016, SQL Server 2014, SQL Server 2012, SQL Server 2008 R2, SQL Server 2008, and SQL Server 2005.

For example

Take a look and explore some examples of ROUND functions in SQL Server.

Example 1: Round the numbers

```
SELECT ROUND(125.315, 2);
Result: 125.320 (kết quả được làm tròn vì tham số thứ 3 bằng 0)
```

```
SELECT ROUND(125.315, 2, 0);
Result: 125.320 (kết quả được làm tròn vì tham số thứ 3 là 0)
```

```
SELECT ROUND(125.315, 2, 1);
Result: 125.310 (kết quả bị cắt bớt vì tham số thứ 3 khác 0)
```

```
SELECT ROUND(125.315, 1);
Result: 125.300 (kết quả được làm tròn vì tham số thứ 3 bằng 0)
```

```
SELECT ROUND(125.315, 0);
Result: 125.000 (kết quả được làm tròn vì tham số thứ 3 bằng 0)
```

```
SELECT ROUND(125.315, -1);
Result: 130.000 (kết quả được làm tròn vì tham số thứ 3 bằng 0)
```

```
SELECT ROUND(125.315, -2);
Result: 100.000 (kết quả được làm tròn vì tham số thứ 3 bằng 0)
```

Example 2: We have the following data table

Bang: Quantrimang

Tyle: %

IDChuyenmuc	Chuyenmuccon	Chuyenmuclon	Tyle
QTM01	SQL Server	Lap trinh	74.6334
QTM02	Facebook	Mang xa hoi	58.9868
QTM03	Python	Lap trinh	36.22
QTM04	JavaScript	Lap trinh	42.68
QTM05	Google Chrome	Trinh duyet web	94.883
QTM06	Instagram	Mang xa hoi	82.16

1. Get the sub-column and rate of the website, rounding the ratio to the 2nd decimal place

```
SELECT Chuyenmuccon, ROUND(Tyle, 2) AS Tylemoi  
FROM Quantrimang;
```

Result:

```
Chuyenmuccon Tylemoi  
SQL Server 74.63  
Facebook 58.99  
Python 36.22  
JavaScript 42.68  
Google Chrome 94.88  
Instagram 82.16
```

2. Get the sub-column and the percentage of Programming on the website, rounding the ratio to the integer part

```
SELECT Chuyenmuccon, ROUND(Tyle, 0) AS Tylemoi  
FROM Quantrimang  
WHERE Chuyenmuclon="Lap trinh";
```

Result:

```
Chuyenmuccon Tylemoi  
SQL Server 75  
Python 36  
JavaScript 43
```

Previous article: [RAND function in SQL Server](#)

Next lesson: [SIGN function in SQL Server](#)

You finished reading the article "**ROUND function in SQL Server**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.