

MySQL In-Built Functions

MySQL has many built-in functions.

This reference contains string, numeric, date, and some advanced functions in MySQL.

MySQL String Functions

1.UPPER() Function OR UCASE() Function

The UPPER() function converts a string to upper-case.

Note: This function is equal to the [UCASE\(\)](#) function.

Syntax

UPPER(*text*)

2.LOWER() Function OR LCASE() Function

The LOWER() function converts a string to lower-case.

Note: The [LCASE\(\)](#) function is equal to the LOWER() function.

Syntax

LOWER(*text*)

3.CONCAT() Function

The CONCAT() function adds two or more expressions together.

Syntax

CONCAT(*expression1, expression2, expression3,...*)

4.CONCAT_WS() Function

The CONCAT_WS() function adds two or more expressions together with a separator.

Syntax

CONCAT_WS(*separator, expression1, expression2, expression3,...*)

5.LENGTH() Function

The LENGTH() function returns the length of a string

Syntax

LENGTH(*string*)

6.REVERSE() Function

The REVERSE() function reverses a string and returns the result.

Syntax

REVERSE(*string*)

7.REPLACE() Function

The REPLACE() function replaces all occurrences of a substring within a string, with a new substring.

Note: This function performs a case-sensitive replacement.

Syntax

REPLACE(*string*, *substring*, *new_string*)

B A N A N A

Replace ('BANANA', 'A', 'O') → B O N O N O

Replace ('BANANA', 'AN', '') → B A

8.LEFT() Function

The LEFT() function extracts characters from a string (starting from left).

Syntax

LEFT(*string*, *number_of_chars*)

9.RIGHT() Function

The RIGHT() function extracts characters from a string (starting from right).

Syntax

RIGHT(*string*, *number_of_chars*)

10.LTRIM() Function

The LTRIM() function removes leading spaces from a string.

Syntax

LTRIM(*string*)

11.TRIM() Function

The TRIM() function removes leading and trailing spaces from a string.

Syntax

TRIM(*string*)

12.SUBSTRING() Function OR SUBSTR() Function OR MID() Function

The SUBSTR() function extracts a substring from a string (starting at any position).

Note: The SUBSTR() and [MID\(\)](#) functions equals to the [SUBSTRING\(\)](#) function.

Syntax

SUBSTR(*string*, *start*, *length*)

13.INSTR() Function

The INSTR() function returns the position of the first occurrence of a string in another string.

This function performs a case-insensitive search.

Syntax

INSTR(*string1*, *string2*)

Substr

-11 -10 -9 -8 -7
M Y S O L
1 2 3 4 5

-6 -5 -4 -3 -2 -1
S E R V E R
6 7 8 9 10 11
→

Substr('MYSQLSERVER', 1, 5) → MySQL

Substr('MYSQLSERVER', 5, 1) → L

Substr('MYSQLSERVER', 6, 3) → SER

Substr('MYSQLSERVER', 8, 6) → RVER

Substr('MYSQLSERVER', 6) → SERVER

⁻¹¹M ⁻¹⁰Y ⁻⁹8 ⁻⁸Q ⁻⁷L ⁻⁶S ⁻⁵E ⁻⁴R ⁻³V ⁻²F ⁻¹R
 1 2 3 4 5 6 7 8 9 10 11

~~subset~~('mysqlSERVER', -6, 3) → SER

~~subset~~('mysqlSERVER', -6) → SERVER

A ~~1~~ A N
-3 -2 -1

sw A ~~1~~ A M \rightarrow ~~1~~ A M
-3 -2 -1

sw 1 T H
-3 -2 -1

Assignment

- ① WA QTD First half of employee names?
- ② WA QTD Second half of employee names?

Index()

B A

1 2

N A

3 4

N A

5 6

Index('BANANA', 'A') → 2

gun before $\frac{1}{P}$ position $\frac{1}{P}$ string

meter $\frac{1}{P}$ string $\frac{1}{P}$ position

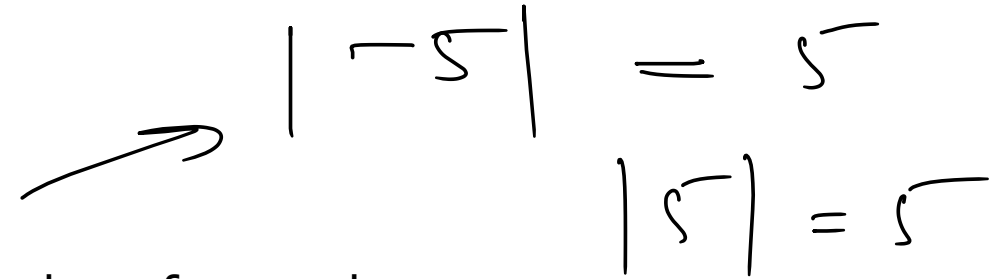
MySQL Numeric Functions

14.ABS() Function

The ABS() function returns the absolute (positive) value of a number.

Syntax

ABS(*number*)


$$\begin{aligned} | -5 | &= 5 \\ | 5 | &= 5 \end{aligned}$$

15.MOD() Function

The MOD() function returns the remainder of a number divided by another number.

Syntax

MOD(*x*, *y*)

OR:

x MOD *y*

OR:

x % *y*


$$\text{mod}(5, 2) \Rightarrow 2 \overline{) 5} \begin{array}{r} 2 \\ \underline{4} \\ 1 \end{array} \rightarrow 1$$

16.ROUND() Function

The ROUND() function rounds a number to a specified number of decimal places.

Syntax

ROUND(*number*, *scale*)

17.TRUNCATE() Function

The TRUNCATE() function truncates a number to the specified number of decimal places.

Syntax

TRUNCATE(*number*, *decimals*)

18.POWER() Function

The POWER() function returns the value of a number raised to the power of another number.

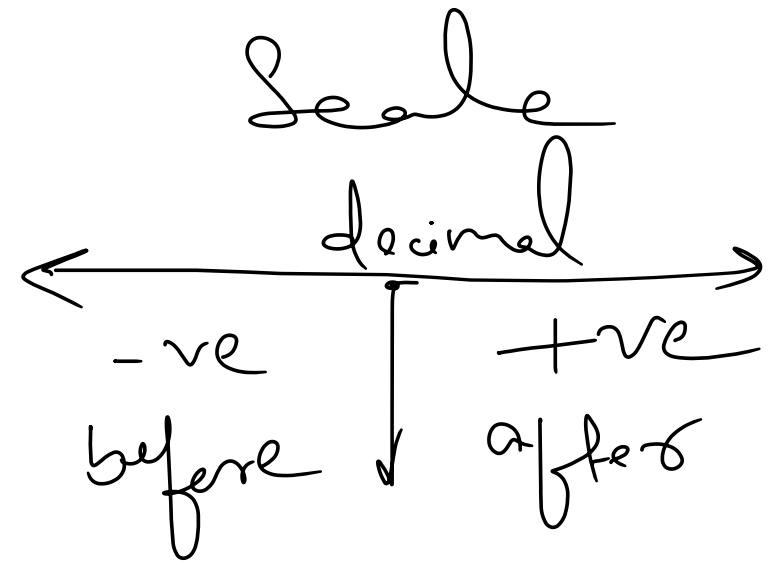
Syntax

POWER(*x*, *y*)

Round (Number, Scale)

Scale +ve \rightarrow after decimal
 \rightarrow position starts from 0

Scale -ve \rightarrow before decimal
 \rightarrow position starts from 1



4 or $< 4 \rightarrow$ previous digit remains - as it is

5 or $> 5 \Rightarrow$ previous digit incremented by 1

5 3 1 6 . 3 0 6 2
 -4 -3 -2 -1 0 1 2 3

Round(5316.3062, 2) → 5316.3100
 → 5316.31

Round(5316.3062, -2) → 5300.0000
 → 5300

Scale → Default value is 0

Round(5316.3062) → 5316

$$\text{Round}(5.\underset{\textcircled{6}}{6}) \rightarrow 6$$

$$\text{Round}(5.4) \rightarrow 5$$

MySQL Date Functions

19.CURDATE() Function or CURRENT_DATE() Function

Note: This function equals the [CURRENT_DATE\(\)](#) function.

Syntax

CURDATE()

20.CURTIME() Function or CURRENT_TIME() Function

The CURTIME() function returns the current time.

Note: This function equals the [CURRENT_TIME\(\)](#) function.

Syntax

CURTIME()

21.SYSDATE() Function OR NOW() Function OR CURRENT_TIMESTAMP() Function

The SYSDATE() function returns the current date and time.

Note: The date and time is returned as "YYYY-MM-DD HH:MM:SS" .

Syntax

SYSDATE()

22.DAY() Function

The DAY() function returns the day of the month for a given date (a number from 1 to 31).

Syntax

DAY(*date*)

23.MONTHNAME() Function

The MONTHNAME() function returns the name of the month for a given date.

Syntax

MONTHNAME(*date*)

24.YEAR() Function

The YEAR() function returns the year part for a given date.

Syntax

YEAR(*date*)

25.TIME() Function

The TIME() function extracts the time part from a given time/datetime.

Syntax

TIME(*expression*)