

TITLE: Learn about various MySQL Functions

Task Performance

CONCAT

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

```
1 SELECT contactFirstName, contactLastName, CONCAT(contactLastName, " ", contactLastName) FROM customers
```

Output

	contactFirstName	contactLastName	CONCAT(contactFirstName , contactLastName)
<input type="checkbox"/> Edit <input type="copy"/> Copy <input type="delete"/> Delete	Carine	Schmitt	Carine Schmitt
<input type="checkbox"/> Edit <input type="copy"/> Copy <input type="delete"/> Delete	Jean	King	JeanKing
<input type="checkbox"/> Edit <input type="copy"/> Copy <input type="delete"/> Delete	Peter	Ferguson	PeterFerguson
<input type="checkbox"/> Edit <input type="copy"/> Copy <input type="delete"/> Delete	Janine	Labrune	Janine Labrune
<input type="checkbox"/> Edit <input type="copy"/> Copy <input type="delete"/> Delete	Jonas	Bergulfsen	Jonas Bergulfsen
<input type="checkbox"/> Edit <input type="copy"/> Copy <input type="delete"/> Delete	Susan	Nelson	SusanNelson
<input type="checkbox"/> Edit <input type="copy"/> Copy <input type="delete"/> Delete	Zbyszek	Piestrzeniewicz	Zbyszek Piestrzeniewicz
<input type="checkbox"/> Edit <input type="copy"/> Copy <input type="delete"/> Delete	Roland	Keitel	RolandKeitel
<input type="checkbox"/> Edit <input type="copy"/> Copy <input type="delete"/> Delete	Julie	Murphy	JulieMurphy
<input type="checkbox"/> Edit <input type="copy"/> Copy <input type="delete"/> Delete	Kwai	Lee	KwaiLee
<input type="checkbox"/> Edit <input type="copy"/> Copy <input type="delete"/> Delete	Diego	Freyre	Diego Freyre

LOWER

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

```
SELECT LOWER(customerName) AS LowercasecustomerName FROM customers
```

Output

LowercasecustomerName
atelier graphique
signal gift stores
australian collectors, co.
la rochelle gifts
baane mini imports
mini gifts distributors ltd.
havel & zbyszek co

CEIL

The CEIL() function returns the smallest integer value that is bigger than or equal to a number.

```
1 SELECT CEIL(70)
```

Output

✓ Showing rows 0 - 0 (1 total, Query took 0.0005 seconds.)

```
SELECT CEIL(70)
```

☐ Show all | Number of rows: 25 ▼ | Filter rows: Search this table

+ Options

CEIL(70)
70

COUNT

The COUNT() function returns the number of records returned by a select query.

Output

Your SQL query has been executed successfully.

```
SELECT COUNT(customerNumber) AS NumberOfCustomers FROM customers
```

+ Options

NumberOfCustomers
122

MIN

The MIN() function returns the minimum value in a set of values.

```
SELECT MIN(buyPrice) AS SmallestBuyPrice FROM products;
```

Output

+ Options
SmallestBuyPrice
 15.91

MOD

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

Output

✓ Showing rows 0 - 0 (1 total, Query took 0.0009 seconds.)

```
SELECT MOD(70 , 3)
```

☐ Show all | Number of rows: 25 ▼ | Filter rows: Search this table

+ Options
MOD(70 , 3)
 1

RAND

The RAND() function returns a random number between 0 (inclusive) and 1 (exclusive).

Output

```
SELECT RAND(4) FROM products
```

1 ▼ > >> | ☐ Show all

+ Options
RAND(4)
 0.15595286540310166
 0.6238114970026645
 0.6511989195376624
 0.3845601374139638
 0.9692039591904766
 0.6923394144441368
 0.5540852253828992
 0.6934079143157302

SUM

The SUM() function calculates the sum of a set of values.

```
SELECT SUM(MSRP) AS TotalMSRP FROM products;
```

Output

TotalMSRP
 11048.26

CURDATE

The CURDATE() function returns the current date.

```
SELECT CURDATE();
```

Output

```
CURDATE()  
2020-05-25
```

DATEDIFF

The DATEDIFF() function returns the number of days between two date values.

```
SELECT DATEDIFF("2020-05-25", "2020-05-06");
```

Output

```
DATEDIFF("2020-05-25", "2020-05-06")  
19
```

ISNULL

The ISNULL() function returns 1 or 0 depending on whether an expression is NULL. If the expression is NULL, this function returns 1. Otherwise, it returns 0.

```
SELECT ISNULL(null) ;
```

Output

```
ISNULL(null)  
1
```

CURTIME

The CURTIME() function returns the current time.

```
SELECT CURTIME();
```

Output

✓ Showing rows 0 - 0 (1 total, Query took 0.0008 seconds.)

```
SELECT CURRENT_TIME()
```

☐ Show all | Number of rows: 25 ▼ | Filter rows:

+ Options
CURRENT_TIME()
20:42:22

UPPER

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

Syntax

UPPER(text)

```
SELECT UPPER(city) AS UppercaseCity  
FROM offices;
```

Output

+ Options
UppercaseCity
SAN FRANCISCO
BOSTON
NYC
PARIS
TOKYO
SYDNEY
LONDON

MAX

The MAX() function returns the maximum value in a set of values.

Syntax

MAX(expression)

```
SELECT MAX(quantityOrdered) AS largestQuantityOrder FROM orderdetails;
```

Output

+ Options

largestQuantityOrder

97

AVG

The AVG() function returns the average value of an expression.

Syntax

AVG(expression)

```
SELECT * FROM payments
WHERE amount > (SELECT AVG(amount) FROM payments);
```

Output

+ Options

		customerNumber	checkNumber	paymentDate	amount
<input type="checkbox"/>	Edit Copy Delete	112	HQ55022	2003-06-06	32641.98
<input type="checkbox"/>	Edit Copy Delete	112	ND748579	2004-08-20	33347.88
<input type="checkbox"/>	Edit Copy Delete	114	GG31455	2003-05-20	45864.03
<input type="checkbox"/>	Edit Copy Delete	114	MA765515	2004-12-15	82261.22

DATE

The DATE() function extracts the date part from a datetime expression.

```
SELECT DATE(paymentDate) FROM payments;
```

Output

DATE(paymentDate)

2004-10-19

2003-06-05

2004-12-18

2004-12-17

2003-06-06

2004-08-20

2003-05-20

2004-12-15

2003-05-31

2004-03-10

IFNULL

The IFNULL() function returns a specified value if the expression is NULL.

If the expression is NOT NULL, this function returns the expression.

Output

✓ Showing rows 0 - 24 (326 total, Query took 0.0029 seconds.)

```
SELECT orderNumber , IFNULL(status , comments) checks from orders
```

1 > >> | ☐ Show all | Number of rows: 25

+ Options				orderNumber	checks
<input type="checkbox"/>				10100	Shipped
<input type="checkbox"/>				10101	Shipped
<input type="checkbox"/>				10102	Shipped
<input type="checkbox"/>				10103	Shipped
<input type="checkbox"/>				10104	Shipped
<input type="checkbox"/>				10105	Shipped
<input type="checkbox"/>				10106	Shipped
<input type="checkbox"/>				10107	Shipped
<input type="checkbox"/>				10108	Shipped
<input type="checkbox"/>				10109	Shipped
<input type="checkbox"/>				10110	Shipped

SUBSTRING

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

```
SELECT SUBSTRING(firstName, 2, 5) AS ExtractString
FROM employees;
```

Output

+ Options
 ExtractString
 iane
 ary
 eff
 illia
 erard
 nthon
 - - -

CHARACTER_LENGTH

The CHARACTER_LENGTH() function returns the length of a string (in characters).

```
SELECT CHARACTER_LENGTH(firstName) AS LengthOfName
FROM employees;
```

Output

LengthOfName
5
4
4
7
6
7
6
6
5
5

CURRENT_USER

The CURRENT_USER() function returns the user name and host name for the MySQL account that the server used to authenticate the current client.



✓ Showing rows 0 - 0 (1 total, Query took 0.0007 seconds.)

```
SELECT CURRENT_USER()
```

☐ Show all | Number of rows: 25 ▼ | Filter rows:

+ Options

CURRENT_USER
root@localhost

CONCLUSION

Hence, in this way we learn various MySQL functions.