Essential MySQL Functions

MySQL has many built-in functions. We will covering some important most used built-in functions; for a complete list refer to the online MySQL Reference Manual (http://dev.mysql.com/doc/).

NOTE: As of now we will be going through only function and their output, as they would be self explanatory.

Numeric Functions

```
SELECT ROUND(5.73)
```

6

```
SELECT ROUND(5.73, 1)
```

5.7

```
SELECT TRUNCATE(5.7582, 2)
```

5.75

```
SELECT CEILING(5.2)
```

6

```
SELECT FLOOR(5.7)
```

5

```
SELECT ABS(-5.2)
```

5.2

```
SELECT RAND() -- Generates a random floating point number b/w
0 & 1
```

STRING Functions

```
SELECT LENGTH('sky')
```

3

```
SELECT UPPER('sky')
```

SKY

```
SELECT LOWER('sky)
```

sky

```
SELECT LTRIM('    sky')
```

sky

```
SELECT RTRIM('sky    ')
```

sky

```
SELECT TRIM('   sky  ')
```

sky

```
SELECT LEFT('Kindergarten', 4)
```

Kind

```
SELECT RIGHT('Kindergarten', 6)
```

garten

```
SELECT SUBSTRING('Kindergarten', 3, 5)
```

nderg

```
SELECT LOCATE('n','Kindergarten') -- LOCATE returns the first
occurrence of a character or character string, if found,
otherwise it returns 0
```

3

```
SELECT REPLACE('Kindergarten', 'garten', 'garden')
```

Kindergarden

```
SELECT CONCAT('first', 'last')
```

firstlast

DATE Functions

```
SELECT NOW()
```

2021-10-21 19:59:47

```
SELECT CURDATE()
```

2021-10-21

```
SELECT CURTIME()
```

20:01:12

```
SELECT MONTH(NOW())
```

10

```
SELECT YEAR(NOW())
```

2021

```
SELECT HOUR(NOW())
```

13

```
SELECT DAYTIME(NOW())
```

Thursday

Formatting Dates and Times

In MySQL, the default date format is "YYYY-MM-DD", ex: "2025-05-12", MySQL allows developers to format it the way they want. We will discuss some of them.

```
SELECT DATE_FORMAT(NOW(), '%M %D %Y')
```

October 22nd 2021

```
SELECT DATE_FORMAT(NOW(), '%m %d %y')
```

10 22 21

```
SELECT DATE_FORMAT(NOW(), '%m %D %y')
```

10 22nd 21

```
SELECT TIME_FORMAT(NOW(), '%H %i %p')
```

14:11 PM

Calculating Dates and Times

```
SELECT DATE_ADD(NOW(), INTERVAL 1 DAY) --return tomorrows date
and time
```

2021-10-23 14:26:17

```
SELECT DATE_ADD(NOW(), INTERVAL -1 YEAR)
```

or

```
SELECT DATE_SUB(NOW(), INTERVAL 1 YEAR)
```

Both the queries will return the same output

2020-10-22 14:29:47

```
SELECT DATEDIFF('2021-09-08 09:00', '2021-07-07 17:00') -- It
will return the difference in number of days, time won't be
considered
```

63

```
SELECT TIME_TO_SEC('09:00') - TIME_TO_SEC('09:02')
```

-120