

THE WORLD'S LARGEST WEB DEVELOPER SITE

# **SQL Working With Dates**

Previous

Next >

### **SQL** Dates

The most difficult part when working with dates is to be sure that the format of the date you are trying to insert, matches the format of the date column in the database.

As long as your data contains only the date portion, your queries will work as expected. However, if a time portion is involved, it gets more complicated.

## SQL Date Data Types

**MySQL** comes with the following data types for storing a date or a date/time value in the database:

- DATE format YYYY-MM-DD
- DATETIME format: YYYY-MM-DD HH:MI:SS
- TIMESTAMP format: YYYY-MM-DD HH:MI:SS
- YEAR format YYYY or YY

- DATE format YYYY-MM-DD
- DATETIME format: YYYY-MM-DD HH:MI:SS
- SMALLDATETIME format: YYYY-MM-DD HH:MI:SS
- TIMESTAMP format: a unique number

**Note:** The date types are chosen for a column when you create a new table in your database!

### SQL Working with Dates

You can compare two dates easily if there is no time component involved!

Assume we have the following "Orders" table:

OrderId	ProductName	OrderDate
1	Geitost	2008-11-11
2	Camembert Pierrot	2008-11-09
3	Mozzarella di Giovanni	2008-11-11
4	Mascarpone Fabioli	2008-10-29

Now we want to select the records with an OrderDate of "2008-11-11" from the table above.

We use the following SELECT statement:

```
SELECT * FROM Orders WHERE OrderDate='2008-11-11'
```

The result-set will look like this:

OrderId $_{ ext{HT}}$	ProductName ML CSS MORE ▼	OrderDate	•	Q
1	Geitost	2008-11-11		
3	Mozzarella di Giovanni	2008-11-11		

Now, assume that the "Orders" table looks like this (notice the time component in the "OrderDate" column):

OrderId	ProductName	OrderDate
1	Geitost	2008-11-11 13:23:44
2	Camembert Pierrot	2008-11-09 15:45:21
3	Mozzarella di Giovanni	2008-11-11 11:12:01
4	Mascarpone Fabioli	2008-10-29 14:56:59

If we use the same SELECT statement as above:

```
SELECT * FROM Orders WHERE OrderDate='2008-11-11'
```

we will get no result! This is because the query is looking only for dates with no time portion.

**Tip:** To keep your queries simple and easy to maintain, do not allow time components in your dates!

Previous
 Next >



Q

#### **COLOR PICKER**



#### **HOW TO**

Tabs
Dropdowns
Accordions
Side Navigation
Top Navigation
Modal Boxes



Progress Bars
MORE Parallax
Login Form
HTML Includes
Google Maps
Range Sliders
Tooltips
Slideshow
Filter List
Sort List

#### **SHARE**







#### **CERTIFICATES**

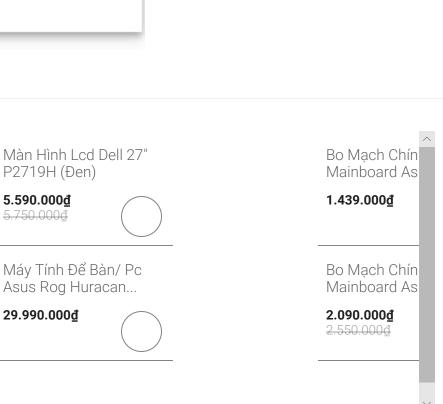
HTML CSS JavaScript SQL Python PHP jQuery

Bootstrap

**XML** 

Read More »













HTML

CSS



#### Thiết Kế Nội Thất Chung Cư Đẹp

Miễn phí thiết kế 2D 3D khi thi công

REPORT ERROR PRINT PAGE

**ABOUT** 

**FORUM** 

#### **Top Tutorials**

HTML Tutorial
CSS Tutorial
JavaScript Tutorial
How To Tutorial
SQL Tutorial
Python Tutorial
W3.CSS Tutorial
Bootstrap Tutorial
PHP Tutorial
jQuery Tutorial
Java Tutorial
C++ Tutorial

#### **Top Examples**

HTML Examples
CSS Examples
JavaScript Examples
How To Examples
SQL Examples
Python Examples
W3.CSS Examples
Bootstrap Examples
PHP Examples
jQuery Examples
Java Examples
XML Examples

#### **Top References**

HTML Reference
CSS Reference
JavaScript Reference
SQL Reference
Python Reference
W3.CSS Reference
Bootstrap Reference
PHP Reference
HTML Colors
jQuery Reference
Java Reference
Angular Reference

#### Web Certificates

HTML Certificate
CSS Certificate
JavaScript Certificate
SQL Certificate
Python Certificate
jQuery Certificate
PHP Certificate
Bootstrap Certificate
XML Certificate

Get Certified »

W3Schools is optimized for learning, testing, and training. Examples might be simplified to improve reading and basic understanding. Futorials, references, and examples are constantly reviewed to avoid errors, but we cannot warrant full correctness of all content. While using this site, you agree to have read and accepted our terms of use, cookie and privacy policy.

Copyright 1999-2020 by Refsnes Data. All Rights Reserved.

Powered by W3.CSS.

