

# HOURL Function

Derives the hour value from a Datetime value. Generated hours are expressed according to the 24-hour clock.

- Source value can be a reference to a column containing literal or Datetime values.
- If the source Datetime value does not include a valid input for this function, a missing value is returned.

**Wrangle vs. SQL:** This function is part of Wrangle , a proprietary data transformation language. Wrangle is not SQL. For more information, see *Wrangle Language*.

## Basic Usage

```
hour(MyDate)
```

**Output:** Generates a column of values that retrieve the two-digit hour values from the `MyDate` column.

## Syntax and Arguments

```
hour(datetime_col)
```

| Argument                  | Required? | Data Type | Description   |
|---------------------------|-----------|-----------|---|
| <code>datetime_col</code> | Y         | datetime  | Name of column whose hour values are to be computed |

For more information on syntax standards, see *Language Documentation Syntax Notes*.

### **datetime\_col**

Name of the column whose hour value is to be computed.

- Missing values for this function in the source data result in missing values in the output.
- Invalid or out-of-range source values generate missing values in the output.
- Multiple columns and wildcards are not supported.

### **Usage Notes:**

| Required? | Data Type | Example Value       |
|-----------|-----------|---------------------|
| Yes       | Datetime  | <code>myDate</code> |

## Examples

**Tip:** For additional examples, see *Common Tasks*.

### **Example - Date element functions**

This example illustrates to how to use date-related functions to derive specific values for a Datetime column type.

### **Functions:**

| Item | Description |
|------|-------------|
|------|-------------|

|                      |  |
|----------------------|--|
| YEAR Function        | Derives the four-digit year value from a Datetime value. Source value can be a reference to a column containing Datetime values or a literal.                              |
| MONTH Function       | Derives the month integer value from a Datetime value. Source value can be a reference to a column containing Datetime values or a literal.                                |
| MONTHNAME Function   | Derives the full name from a Datetime value of the corresponding month as a String. Source value can be a reference to a column containing Datetime values or a literal.   |
| WEEKDAYNAME Function | Derives the full name from a Datetime value of the corresponding weekday as a String. Source value can be a reference to a column containing Datetime values or a literal. |
| DAY Function         | Derives the numeric day value from a Datetime value. Source value can be a reference to a column containing Datetime values or a literal.                                  |
| HOURL Function       | Derives the hour value from a Datetime value. Generated hours are expressed according to the 24-hour clock.  |
| MINUTE Function      | Derives the minutes value from a Datetime value. Minutes are expressed as integers from 0 to 59.   |
| SECOND Function      | Derives the seconds value from a Datetime value. Source value can be a reference to a column containing Datetime values or a literal.                                      |

**Source:**

|               |
|---------------|
| <b>date</b>   |
| 2/8/16 15:41  |
| 12/30/15 0:00 |
| 4/26/15 7:07  |

**Transformation:**

|                                |                    |
|--------------------------------|--------------------|
| <b>Transformation Name</b>     | New formula        |
| <b>Parameter: Formula type</b> | Single row formula |
| <b>Parameter: Formula</b>      | YEAR (date)        |

|                                |                    |
|--------------------------------|--------------------|
| <b>Transformation Name</b>     | New formula        |
| <b>Parameter: Formula type</b> | Single row formula |
| <b>Parameter: Formula</b>      | MONTH (date)       |

|                                |                    |
|--------------------------------|--------------------|
| <b>Transformation Name</b>     | New formula        |
| <b>Parameter: Formula type</b> | Single row formula |
| <b>Parameter: Formula</b>      | MONTHNAME (date)   |

|                                |                    |
|--------------------------------|--------------------|
| <b>Transformation Name</b>     | New formula        |
| <b>Parameter: Formula type</b> | Single row formula |
| <b>Parameter: Formula</b>      | WEEKDAYNAME (date) |

|                                |                    |
|--------------------------------|--------------------|
| <b>Transformation Name</b>     | New formula        |
| <b>Parameter: Formula type</b> | Single row formula |
| <b>Parameter: Formula</b>      | DAY (date)         |

|                                |                    |
|--------------------------------|--------------------|
| <b>Transformation Name</b>     | New formula        |
| <b>Parameter: Formula type</b> | Single row formula |
| <b>Parameter: Formula</b>      | HOUR (date)        |

|                                |                    |
|--------------------------------|--------------------|
| <b>Transformation Name</b>     | New formula        |
| <b>Parameter: Formula type</b> | Single row formula |
| <b>Parameter: Formula</b>      | MINUTE (date)      |

|                                |                    |
|--------------------------------|--------------------|
| <b>Transformation Name</b>     | New formula        |
| <b>Parameter: Formula type</b> | Single row formula |
| <b>Parameter: Formula</b>      | SECOND (date)      |

**Results:**

**NOTE:** If the source Datetime value does not contain a valid input for one of these functions, no value is returned. See the `second_date` column below.

| date                  | year_date | month_date | monthname_date | weekdayname_date | day_date | hour_date | minute_date | second_date |
|-----------------------|-----------|------------|----------------|------------------|----------|-----------|-------------|-------------|
| 2/8/16<br>15:41       | 2016      | 2          | February       | Monday           | 8        | 15        | 41          |             |
| 12/30<br>/15 0:<br>00 | 2015      | 12         | December       | Wednesday        | 30       | 0         | 0           |             |
| 4/26<br>/15 7:<br>07  | 2015      | 4          | April          | Sunday           | 26       | 7         | 7           |             |