

DATE Function

Contents:

- *Basic Usage*
- *Syntax and Arguments*
 - *year_integer_col*
 - *month_integer_col*
 - *day_integer_col*
 - *date_format_string*
- *Examples*
 - *Example - date and time functions*

Generates a date value from three inputs of Integer type: year, month, and day.

- Source values can be Integer literals or column references to values that can be inferred as Integers.
- If any of the source values are invalid or out of range, a missing value is returned.
- This function must be nested within another function that accepts date values, such as DATEFORMAT, as arguments. See the example below.

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

Integer literal values:

```
dateformat(date(2015,02,15),&apos;yyyy-MM-dd&apos;)
```

Output: Returns the formatted date value: 2015-02-15.

Column reference values:

```
dateformat(date(myYear, myMonth, myDay),&apos;MMM yyyy&apos;)
```

Output: Returns date values based on three columns, formatted for date.

Syntax and Arguments

```
dateformat(date(year_integer_col,month_integer_col,day_Integer_col ),&apos;  
date_format_string&apos;)
```

Argument	Required?	Data Type	Description
year_integer_col	Y	integer	Name of column or Integer literal representing the year value to apply to the function
month_integer_col	Y	integer	Name of column or Integer literal representing the month value to apply to the function
day_integer_col	Y	integer	Name of column or Integer literal representing the day value to apply to the function
date_format_string	Y	string	String literal identifying the date format to apply to the value

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

year_integer_col

Integer literal or name of the column containing integer values for the year.

- Missing values for this function in the source data result in missing values in the output.
- Multiple columns and wildcards are not supported.

Usage Notes:

Required?	Data Type	Example Value
Yes	Integer (literal or column reference)	2015

month_integer_col

Integer literal or name of the column containing integer values for the month.

- Values must be 1 or more, with a maximum value of 12.
- Missing values for this function in the source data result in missing values in the output.
- Multiple columns and wildcards are not supported.

Usage Notes:

Required?	Data Type	Example Value
Yes	Integer (literal or column reference)	4

day_integer_col

Integer literal or name of the column containing integer values for the day.

- Values must be 1 or more, with a maximum value for any month of 31.
- Missing values for this function in the source data result in missing values in the output.
- Multiple columns and wildcards are not supported.

Usage Notes:

Required?	Data Type	Example Value
Yes	Integer (literal or column reference)	26

date_format_string

String literal that describes how the date value is formatted.

Usage Notes:

Required?	Data Type	Example Value
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Yes	String literal value	'yyyy-MM-dd'
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For more information, see *DATEFORMAT Function*.

Examples

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

Example - date and time functions

This example provides an overview on various date and time functions.

Functions:

Item	Description
DATE Function	Generates a date value from three inputs of Integer type: year, month, and day.
TIME Function	Generates time values from three inputs of Integer type: hour, minute, and second.
DATETIME Function	Generates a Datetime value from the following inputs of Integer type: year, month, day, hour, minute, and second.
DATEFORMAT Function	Formats a specified Datetime set of values according to the specified date format. Source values can be a reference to a column containing Datetime values.

Source:

year	month	day	hour	minute	second
2016	10	11	2	3	0
2015	11	20	15	22	30
2014	12	25	18	30	45

Transformation:

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	DATEFORMAT(DATE (year, month, day), 'yyyy-MM-dd')
Parameter: New column name	'fctn_date'

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	DATEFORMAT(TIME (hour, minute, second), 'HH-mm-ss')
Parameter: New column name	'fctn_time'

Transformation Name	New formula
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Parameter: Formula type	Single row formula
Parameter: Formula	DATEFORMAT(DATETIME (year, month, day, hour, minute, second), 'yyyy-MM-dd-HH:mm:ss')
Parameter: New column name	'fctn_datetime'

Results:

NOTE: All inputs must be inferred as Integer type and must be valid values for the specified input. For example, month values must be integers between 1 and 12, inclusive.

year	month	day	hour	minute	second	fctn_date	fctn_time	fctn_datetime
2016	10	11	2	3	0	2016-10-11	02-03-00	2016-10-11-02:03:00
2015	11	20	15	22	30	2015-11-20	15-22-30	2015-11-20-15:22:30
2014	12	25	18	30	45	2014-12-25	18-30-45	2014-12-25-18:30:45

You can apply other date and time functions to the generated columns. For an example, see *YEAR Function*.