

MODEIF Function

Contents:

- *Basic Usage*
 - *Syntax*
 - *function_col_ref*
 - *test_expression*
 - *Examples*
 - *Example - MODEIF function*
-

Computes the mode (most frequent value) from all row values in a column, according to their grouping. Input column can be of Integer or Decimal type.

- If a row contains a missing or null value, it is not factored into the calculation. If the entire column contains no values, the function returns a null value.
- If there is a tie in which the most occurrences of a value is shared between values, then no value is returned from the function.
- When used in a `pivot` transform, the function is computed for each instance of the value specified in the `group` parameter. See *Pivot Transform*.

For a non-conditional version of this function, see *MODE Function*.

For a version of this function computed over a rolling window of rows, see *ROLLINGMODE Function*.

Basic Usage

```
modeif(count_visits, health_status == 'sick')
```

Output: Returns the mode of the values in the `count_visits` column as long as `health_status` is set to `sick`.

Syntax

```
modeif(function_col_ref, test_expression) [group:group_col_ref] [limit:limit_count]
```

Argument	Required?	Data Type	Description
<code>function_col_ref</code>	Y	string	Name of column to which to apply the function
<code>test_expression</code>	Y	string	Expression that is evaluated. Must resolve to <code>true</code> or <code>false</code>

For more information on the `group` and `limit` parameters, see *Pivot Transform*.

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

function_col_ref

Name of the column the values of which you want to calculate the function. Column must contain Integer or Decimal values.

- Literal values are not supported as inputs.
- Multiple columns and wildcards are not supported.

Usage Notes:

Required?	Data Type	Example Value
Yes	String (column reference)	myValues

test_expression

This parameter contains the expression to evaluate. This expression must resolve to a Boolean (`true` or `false`) value.

Usage Notes:

Required?	Data Type	Example Value
Yes	String expression that evaluates to <code>true</code> or <code>false</code>	<code>(LastName == 'Mouse' && FirstName == 'Mickey')</code>

Examples

Example - MODEIF function

The following data contains a list of weekly orders for 2017 across two regions (`r01` and `r02`). You are interested in calculating the most common order count for the second half of the year, by region.

Source:

NOTE: For simplicity, only the first few rows are displayed.

Date	Region	OrderCount
1/6/2017	r01	78
1/6/2017	r02	97
1/13/2017	r01	92
1/13/2017	r02	90
1/20/2017	r01	97
1/20/2017	r02	84

Transformation:

To assist, you can first calculate the week number for each row:

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	weeknum(Date)
Parameter: New column name	'weekNumber '

Then, you can use the following aggregation to determine the most common order value for each region during the second half of the year:

Transformation Name	Pivot columns
Parameter: Row labels	Region
Parameter: Values	modeif(OrderCount, weekNumber > 26)
Parameter: Max number of columns to create	50

Results:

Region	modeif_OrderCount
r01	85
r02	100