

COUNTIF Function

Generates the count of rows in each group that meet a specific condition. Generated value is of Integer type.

NOTE: When added to a transform, this function is applied to the current sample. If you change your sample or run the job, the computed values for this function are updated. Transforms that change the number of rows in subsequent recipe steps do not affect the values computed for this step.

To perform a simple count of rows without conditionals, use the `COUNT` function. See *COUNT Function*.

Basic Usage

```
pivot value: COUNTIF(failed_deliveries >= 10) group:postal_code limit:1
```

Output: Generates a two-column table containing the unique values for `postal_code` and the count of records for that `postal_code` value in which the value of the `failed_deliveries` column is greater than or equal to 10. The `limit` parameter defines the maximum number of output columns.

Syntax and Arguments

```
pivot value:COUNTIF(test_expression) [group:group_col_ref] [limit:limit_count]
```

Argument	Required?	Data Type	Description
test_expression	Y	string	Expression that is evaluated. Must resolve to true or false

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

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

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 true or false	(LastName == 'Mouse' && FirstName == 'Mickey')

Examples

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

Example - COUNTIF Functions

This section provides simple examples for how to use the `COUNTIF` and `COUNTIFA` functions. These functions include the following:

- COUNTIF - Count the number of values within a group that meet a specific condition. See *COUNTIF Function*.
- COUNTAIF - Count the number of non-null values within a group that meet a specific condition. See *COUNTAIF Function*.

Source:

The following data identifies sales figures by salespeople for a week:

EmployeeId	Date	Sales
S001	1/23/17	25
S002	1/23/17	40
S003	1/23/17	48
S001	1/24/17	81
S002	1/24/17	11
S003	1/24/17	25
S001	1/25/17	9
S002	1/25/17	40
S003	1/25/17	
S001	1/26/17	77
S002	1/26/17	83
S003	1/26/17	
S001	1/27/17	17
S002	1/27/17	71
S003	1/27/17	29
S001	1/28/17	
S002	1/28/17	
S003	1/28/17	14
S001	1/29/17	2
S002	1/29/17	7
S003	1/29/17	99

Transform:

You are interested in the count of dates during the week when each salesperson sold less than 50 units, not factoring the weekend. First, you try the following:

```
pivot value:COUNTIF(Sales < 50) group:EmployeeId limit:1
```

You notice, however, that the blank values, when employees were sick or had vacation, are being counted. Additionally, this step does not filter out the weekend. You must identify the weekend days using the WEEKDAY function:

```
derive type:single value:WEEKDAY(Date) as:'DayOfWeek'
```

If `DayOfWeek > 5`, then it is a weekend date. For further precision, you can use the `COUNTAIF` function to remove the nulls:

```
pivot value:COUNTAIF(Sales, DayOfWeek<6) group:EmployeeId limit:1
```

The above counts the non-null values in `Sales` when the day of the week is not a weekend day, as grouped by individual employee.

Results:

EmployeeId	countaif_Sales
S001	5
S002	4
S003	4