

LISTIF Function

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Returns list of all values in a column for rows that match a specified condition.

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 extraction of values without conditionals, use the LIST function. See *LIST Function*.

Basic Usage

```
pivot value: LISTIF(hotChocolateLiters, 500, temperature < 0) group:date limit:1
```

Output: Generates a two-column table containing the unique values for `date` and the values from the `hotChocolateLiters` column for each date when the `temperature` value is less than 0. Maximum number of values is 500. The `limit` parameter defines the maximum number of output columns.

Syntax and Arguments

```
pivot value:LISTIF(col_ref, limit, test_expression) [group:group_col_ref] [limit:limit_count]
```

Argument	Required?	Data Type	Description
<code>col_ref</code>	Y	string	Reference to the column you wish to evaluate.
<code>limit_int</code>	N	integer	Maximum number of values to extract into the list array. From 1 to 1000.
<code>test_expression</code>	Y	string	Expression that is evaluated. Must resolve to <code>true</code> or <code>false</code>

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

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

col_ref


Name of the column whose values you wish to use in the calculation. Column must be a numeric (Integer or Decimal) type.


Usage Notes:

Required?	Data Type	Example Value
Yes	String that corresponds to the name of the column	myValues

limit_int

Non-negative integer that defines the maximum number of values to extract into the list array.

 **NOTE:** If specified, this value must be between 1 and 1000, inclusive.

 **NOTE:** Do not use the limiting argument in a LISTIF function call on a flat aggregate, in which all values in a column have been inserted into a single cell. In this case, you might be able to use the limit argument if you also specify a group parameter. Misuse of the LISTIF function can cause the application to crash.

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 - ANYIF and LISTIF Functions

This section provides simple examples for how to use the ANYIF and LISTIF functions. These functions include the following:

- ANYIF - Identifies a single value from a group that meets a specific condition. See *ANYIF Function*.
- LISTIF - Lists all values within a group that meet a specified condition. See *LISTIF 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:

In this example, you are interested in the high performers. A good day in sales is one in which an individual sells more than 80 units. First, you want to identify the day of week:

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

Values greater than 5 in `DayOfWeek` are weekend dates. You can use the following to identify if anyone reached this highwater marker during the workweek (non-weekend):

```
pivot value:ANYIF(Sales, (Sales > 80 && DayOfWeek < 6)) group:EmployeeId,Date limit:1
```

Before adding the step to the recipe, you take note of the individuals who reached this mark in the `anyif_Sales` column for special recognition.

Now, you want to find out sales for individuals during the week. You can use the following to filter the data to show only for weekdays:

```
pivot value:LISTIF(Sales, 1000, (DayOfWeek < 6)) group:EmployeeId,Date limit:1
```

To clean up, you might select and replace the following values in the `listif_Sales` column with empty strings:

```
[ "
" ]
[ ]
```

Results:

EmployeeId	Date	listif_Sales
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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	40
S002	1/25/17	
S003	1/25/17	66
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	
S001	1/29/17	
S002	1/29/17	
S003	1/29/17	