2022

6 WAYS TO CREATE CALCULATED TABLES

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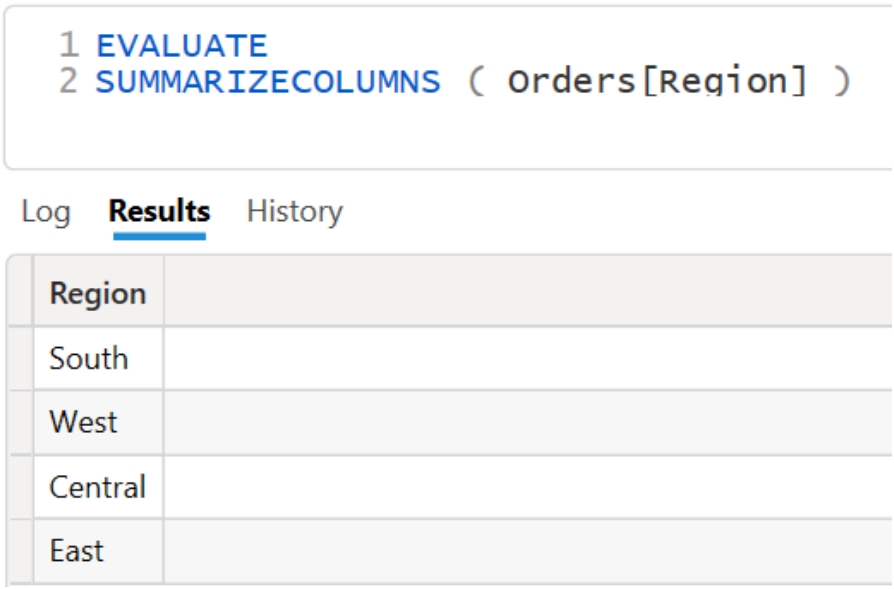
ENTITY ONLY

The first and most simple type of table is with extracting one column or measure. The DAX for the calculated table is as follows:

```
EVALUATE
SUMMARIZECOLUMNS ( Orders[Region] )
```

RESULT



ENTITY+ MEASURE

This is the commonly use table format with column plus measure. This type of table helps you group your values by one or multiple columns.

```
EVALUATE
SUMMARIZECOLUMNS ( Orders[Region], "Sale", [Total Sale] )
```

RESULT

```
1 EVALUATE
2 SUMMARIZECOLUMNS ( Orders[Region], "Sale", [Total Sale] )
```

Log **Results** History

Region	Sale
South	896114.047500002
West	1750242.444
Central	1195099.9032
East	1628198.93899999

FILTER

Once you generate a table, the next action you can take is to filter it down. Wrap your table within the Filter context and use AND/OR conditions to add layers of filters.

```
EVALUATE
FILTER (
SUMMARIZECOLUMNS (
Orders[Colors], Orders[Region], 'Product'[Category],
"Sale", [Total Sale]
),
( Orders[Region] = "South" || Orders[Region] = "West" )
&& ( Orders[Colors] = "Green" || Orders[Colors] = "Blue" )
&& [Sale] > 80000
)
```

RESULT

Log **Results** History

Colors	Region	Category	Sale
Green	West	Furniture	161591.923
Green	West	Office Supplies	118090.506
Green	West	Technology	136779.272
Blue	South	Technology	87219.559

TOP N

TopN helps you to refine the data for a more granular analysis. As it reduces data volume that also improves the speed. Like Filter, you can wrap your calculated table within TopN to get the desired result.

```
EVALUATE
TOPN (
  3,
  SUMMARIZECOLUMNS (
   Orders[Colors], Orders[Region], 'Product'[Category],
   "Sale", [Total Sale]
  ),
    [Sale], DESC
)
```

RESULT

Colors	Region	Category	Sale
Green	East	Furniture	142865.34
Green	West	Furniture	161591.923
Green	East	Technology	231188.023

ADD COLUMN - AGG

Calculated Table allows you to add new columns and in addition to that let you apply filter based on them. You can add aggregations, classifications, and ranking. Let's take a look at aggregation.

```
EVALUATE
SUMMARIZECOLUMNS (
Customers[Customer Name],
"Count of Product", COUNT ( 'Orders'[Product ID] )
)
```

RESULT

Log **Results** History

Customer Name	Count of Product
Claire Gute	13
Darrin Van Huff	27
Sean O'Donnell	39
Brosina Hoffman	50
Andrew Allen	34
Irene Maddox	46
Harold Pawlan	22

ADD COLUMN - CLASS

The second type of column is the classification where you can use the IF function to add a column based on some result. It helps in creating groups or tagging.

```
EVALUATE
SUMMARIZECOLUMNS (
Customers[Customer Name],
"Customer Type", IF ( [Total Sale] > 8000, "High", "Low" ),
"Sale", [Total Sale]
)
```

RESULT

Log **Results** History

Customer Name	Customer Type	Sale
Claire Gute	Low	3309.62
Darrin Van Huff	Low	3358.449
Sean O'Donnell	Low	6033.207
Brosina Hoffman	High	9665.494
Andrew Allen	Low	5316.616
Irene Maddox	High	8990.034

ADD COLUMN - RANK

The third type of column you can add is a ranking order. RankX and TopN are two sides of the same coin. The difference is that TopN filter out the columns and RankX categorizes them.

```
EVALUATE
FILTER (
  SUMMARIZECOLUMNS (
  Customers[Customer Name], Orders[Region],
  "Sale", [Total Sale],
  "Rank",
  RANKX (
  CROSSJOIN ( ALL ( Customers[Customer Name] ),
ALL(Orders[Region] ) ),
[Total Sale],    , DESC )
),
[Rank] <= 10
)
```

RESULT

Log **Results** History

Customer Name	Region	Sale	Rank
Tamara Chand	Central	55110.618	1
Raymond Buch	West	43035.828	2
Tom Ashbrook	East	41170.494	3

DATEBETWEEN

The final type of measure you can use in the Calculated column is DateBetween. Filter can be used to apply filters on specific days but it can be used to filter out a range of dates.

```
EVALUATE
SUMMARIZECOLUMNS (
'Calendar'[Date],
DATESBETWEEN ( 'Calendar'[Date], DATE ( 2014, 2, 10 ), DATE ( 2014, 3, 15 ) ),
"Sale", [Total Sale]
)
```

RESULT

Log **Results** History

Date	Sale
11-02-2014 00:00:00	2043.4
12-02-2014 00:00:00	129.568
14-02-2014 00:00:00	576.726
15-02-2014 00:00:00	21.36
16-02-2014 00:00:00	9.04
17-02-2014 00:00:00	54.208
18-02-2014 00:00:00	37.784
20-02-2014 00:00:00	95.59