

DOMO Analyzer

If you are familiar with SQL, you can understand well how a DOMO card works by mapping major sections on Analyzer screen to components of an SQL query.

DOMO Card is basically a visual representation of the result set by an SQL query.

Table

DATA
PEP_2016_PEPANNRES_with_ann.xlsx - PEP_2016_PEPANNRES_with_ann
53 rows

Available columns of the table

DIMENSIONS
T Geography
T Id

Conditions in WHERE clause

FILTERS
Geography does not contain ...
Drag column here

Columns in SELECT clause

MEASURES
123 April 1, 2010 - Census
123 April 1, 2010 - Estimates Base
123 = GrowthRate
123 Id2

Beast Mode Function

Growth Rate
FORMULA [Validate Formula](#)
1 `sum(`Population2016` - `Population2010`) / sum(`Population2010`)`

SQL Query

```
SELECT
  Geography
, sum(`Population2016` - `Population2010`) /
  sum(`Population2010`) as GrowthRate
FROM
  PEP 2016 PEPANNERS
WHERE
  Geography <> 'abc'
GROUP BY
  Geography
```

It is better to include aggregate function such as SUM() in the beast mode function formula so that the function works well with any granularity set by the columns on the card (imagine that GROUP BY clause with the chosen columns is added in the SQL query as shown above).

Beast Mode

Reference Guide

<http://knowledge.domo.com?cid=beastmodereference>

Function	How to Write	Note
Conditional Expressions with CASE	<pre>-- Pattern #1 CASE WHEN `Amount` > 1000 THEN 'Big' WHEN `Amount` > 500 THEN 'Mid' ELSE 'Small' END -- Pattern #2 CASE `Geography` WHEN 'California' THEN 'CA' WHEN 'New York' THEN 'NY' ELSE 'Other' END</pre>	IN and LIKE operators are available in WHEN clause.
NULLIF	<pre>SUM(`Population2016`) / NULLIF(SUM(`Population2010`), 0)</pre>	NULLIF returns NULL if the first parameter equals the second parameter. One of the use cases of this function is setting NULL if the denominator value is 0 in division to avoid divide-by-zero errors.
IFNULL	<pre>IFNULL(`Student_Id`, 'NOT FOUND')</pre>	This is different from NULLIF! IFNULL converts the first parameter to the second parameter if the first parameter is NULL.

Beast Mode

Function	How to Write	Note
External Link	<code>CONCAT('This is a link')</code>	`URL` is a field that contains the fully qualified URL to the site to which you would like to link. e.g. https://domo.example.com
Image file from the Internet	<code>CONCAT('</>')</code>	`URL` is a field that contains the fully qualified URL to the image you would like to show. e.g. https://domo.example.com/image/sample_image.jpg
Substring	<p>-- Extract domain part from email address <code>SUBSTRING(`email_address`, INSTR(`email_address`, '@') + 1)</code></p> <p>-- Initials <code>CONCAT(SUBSTRING(`First_Name`, 1, 1), ', ', SUBSTRING(`Last_Name`, 1, 1))</code></p>	
Window function	<p>-- Pattern #1 (Ratio of the population of each row against the total population) <code>SUM(`Population`) / SUM(SUM(`Population`)) OVER()</code></p> <p>-- Pattern #2 (Partitioned by Region) <code>SUM(`Population`) / SUM(SUM(`Population`)) OVER(PARTITION BY `Region`)</code></p>	As of November, 2018, it seems Windows function cannot be used with Total Row in CHART PROPERTIES on Analyzer.