

Perform time series analysis with DSCVR's powerful and specialized set of group functions. They are used to perform aggregation operations on rows that have the same values in a set of given columns. Here are a few of the many group functions to use when creating analyses.

Summarization

Unique count | `g_ucnt(G;S;X)`

Returns the number of distinct values within a given group.

Use this to count the number of unique items by transaction ID: `g_ucnt(;;transid)`

94873
94873
94873
2165
2165
77564
77564

3

Shifting

Row shift | `g_rshift(G;S;O;X;N)`

Returns the value of the row that is a specified number of rows before (or after) the current row within a given group.

Use this to pull the sales value from the prior row for each month from the previous year: `g_rshift(month;;;sales;-1)`

Mth/Yr	Sales	Sales M-1
02/2017
03/2017
04/2017
05/2017
06/2017

Time and Order

First/Last | `g_first(G;S;O;X)/g_last(G;S;O;X)`

Returns the first non-NA value within a given group.

Use this to find a customer's first trial date:
`g_first(customer;sku_include;date;date)`
 where `sku_include` is a boolean that indicates item of interest.

Or to find a customer's last trial date:
`g_last(customer;sku_include;date;date)`

01/26/2018
02/08/2018
02/15/2018
02/21/2018
03/07/2018
03/19/2019

Enumerate | `g_enum(G;S;O;X)`

Returns the enumeration of unique values across one or more columns within a given group.

Use this to enumerate all unique divisions for all stores:
`g_enum(;;sdiv)`

...	1
...	2
...	3
...	4
...	5
...	6
...	7

Statistics

Rank | `g_rank(G;S;O;X)`

Returns the rank of every value within a given group.

Use this to rank items for all daily transactions from highest to lowest in terms of sales price for each store:
`g_rank(store date;;;sales)`

...	4
...	7
...	3
...	1
...	5
...	2
...	6

Conditional

Or | `g_or(G;S;X)`

Returns a boolean value indicating whether any value within a given group is true.

Use this to find baskets containing an item:
`g_or(transid;sku_include;value)`
 where `sku_include` is a boolean that indicates item of interest.

...	0
...	0
...	1
...	0
...	0
...	1
...	1