

EXAMPLE - Rolling Date Functions

This example describes how to use rolling functions for Datetime values.

Functions:

Item	Description
ROLLINGMINDATE Function	Computes the rolling minimum of Date values forward or backward of the current row within the specified column. Inputs must be of Datetime type.
ROLLINGMAXDATE Function	Computes the rolling maximum of date values forward or backward of the current row within the specified column. Inputs must be of Datetime type.
ROLLINGMODEDATE Function	Computes the rolling mode (most common value) forward or backward of the current row within the specified column. Input values must be of Datetime data type.

Source:

The following table contains an unordered list of orders:

myDate	proldd	orderDollars
2020-03-13	p001	1445
2020-03-06	p002	712
2020-03-16	p003	1374
2020-03-23	p001	1675
2020-04-09	p002	1005
2020-08-09	p003	984
2020-05-02	p001	1395
2020-06-14	p002	1866
2020-07-16	p003	824
2020-09-02	p001	1785
2020-08-31	p002	697
2020-10-22	p003	1513
2020-03-17	p001	768
2020-03-21	p002	1893
2020-03-23	p003	1122
2020-04-06	p001	805
2020-05-09	p002	1752
2021-01-09	p003	616
2020-08-18	p001	1563
2020-09-12	p002	730
2020-10-04	p003	587
2021-02-15	p001	1979
2021-02-22	p002	134
2021-03-14	p003	938

Transformation:

You can use the following Window transformation to calculate the rolling minimum, maximum, and mode dates for the last five orders for each product identifier:

Transformation Name	Window
Parameter: Formula1	ROLLINGMINDATE(orderDate, 4, 0)
Parameter: Formula2	ROLLINGMAXDATE(orderDate, 4, 0)
Parameter: Formula3	ROLLINGMODEDATE(orderDate, 4, 0)
Parameter: Group by	prodId
Parameter: Order by	prodId

You can use the following transformation to rename the generated window columns:

Transformation Name	Rename columns
Parameter: Option	Manual rename
Parameter: Column	window1
Parameter: New column name	rollingMinDate
Parameter: Parameter: Column	window2
Parameter: New column name	rollingMaxDate
Parameter: Parameter: Column	window3
Parameter: New column name	rollingModeDate

Results:

orderDate	prodId	orderDollars	rollingMinDate	rollingMaxDate	rollingModeDate
3/16/20	p003	1374	3/16/20	3/16/20	3/16/20
8/9/20	p003	984	3/16/20	8/9/20	3/16/20
7/16/20	p003	824	3/16/20	8/9/20	3/16/20
10/22/20	p003	1513	3/16/20	10/22/20	3/16/20
3/23/20	p003	1122	3/16/20	10/22/20	3/16/20
1/9/21	p003	616	3/23/20	1/9/21	3/23/20
10/4/20	p003	587	3/23/20	1/9/21	3/23/20
3/14/21	p003	938	3/23/20	3/14/21	3/23/20
3/13/20	p001	1445	3/13/20	3/13/20	3/13/20
3/23/20	p001	1675	3/13/20	3/23/20	3/13/20
5/2/20	p001	1395	3/13/20	5/2/20	3/13/20
9/2/20	p001	1785	3/13/20	9/2/20	3/13/20

3/17/20	p001	768	3/13/20	9/2/20	3/13/20
4/6/20	p001	805	3/17/20	9/2/20	3/17/20
8/18/20	p001	1563	3/17/20	9/2/20	3/17/20
2/15/21	p001	1979	3/17/20	2/15/21	3/17/20
3/6/20	p002	712	3/6/20	3/6/20	3/6/20
4/9/20	p002	1005	3/6/20	4/9/20	3/6/20
6/14/20	p002	1866	3/6/20	6/14/20	3/6/20
8/31/20	p002	697	3/6/20	8/31/20	3/6/20
3/21/20	p002	1893	3/6/20	8/31/20	3/6/20
5/9/20	p002	1752	3/21/20	8/31/20	3/21/20
9/12/20	p002	730	3/21/20	9/12/20	3/21/20
2/22/21	p002	134	3/21/20	2/22/21	3/21/20