

EXAMPLE - Rolling Date Functions

This example describes how to use the rolling computational functions:

- **ROLLINGMINDATE** - Computes the rolling minimum of Date values forward or backward of the current row within the specified column. Inputs must be of Datetime type. See *ROLLINGMINDATE Function*.
- **ROLLINGMAXDATE** - Computes the rolling maximum of date values forward or backward of the current row within the specified column. Inputs must be of Datetime type. See *ROLLINGMAXDATE Function*.
- **ROLLINGMODEDATE** - 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. See *ROLLINGMODEDATE Function*.

Source:

The following table contains an unordered list of orders:

myDate	prodlid	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