

EXAMPLE - KTHLARGESTDATE Functions

This example illustrates how you can apply conditionals to calculate minimum, maximum, and most common date values.

Functions:

Item	Description
KTHLARGESTDATE Function	Extracts the ranked Datetime value from the values in a column, where $k=1$ returns the maximum value. The value for k must be between 1 and 1000, inclusive. Inputs must be valid Datetime values.
KTHLARGESTUNIQUEDATE Function	Extracts the ranked unique Datetime value from the values in a column, where $k=1$ returns the maximum value. The value for k must be between 1 and 1000, inclusive. Inputs must be Datetime.
KTHLARGESTDATEIF Function	Extracts the ranked Datetime value from the values in a column, where $k=1$ returns the maximum value, when a specified condition is met. The value for k must be between 1 and 1000, inclusive. Inputs must be Datetime.
KTHLARGESTUNIQUEDATEIF Function	Extracts the ranked unique Datetime value from the values in a column, where $k=1$ returns the maximum value, when a specified condition is met. The value for k must be between 1 and 1000, inclusive. Inputs must be Datetime.

Source:

Here is some example transaction data:

Date	Product	Units	UnitCost	OrderValue
3/28/2020	ProductA	4	10.00	40.00
3/8/2020	ProductB	4	20.00	80.00
3/12/2020	ProductC	2	30.00	60.00
3/23/2020	ProductA	1	10.00	10.00
3/20/2020	ProductB	2	20.00	40.00
3/12/2020	ProductC	9	30.00	270.00
3/28/2020	ProductA	5	10.00	50.00
3/23/2020	ProductB	8	20.00	160.00
3/16/2020	ProductC	9	30.00	270.00
3/8/2020	ProductA	5	10.00	50.00
3/10/2020	ProductB	3	20.00	60.00
3/13/2020	ProductC	1	30.00	30.00
3/12/2020	ProductA	7	10.00	70.00
3/10/2020	ProductB	7	20.00	140.00
3/24/2020	ProductC	9	30.00	270.00
3/15/2020	ProductA	8	10.00	80.00
3/10/2020	ProductB	5	20.00	100.00
3/10/2020	ProductC	4	30.00	120.00

Transformation:

The following transformation computes the third highest date in the Date column:

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	kthlargestdate(Date, 3)
Parameter: New column name	'kthlargestdate'

This transformation computes the third highest unique value in the Date column:

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	kthlargestuniquedate(Date, 3)
Parameter: New column name	'kthlargestuniquedate'

Following transformation calculates the 3rd highest date value when the OrderValue > 200:

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	kthlargestdateif(Date, 3, OrderValue > 200)
Parameter: New column name	'kthlargestdateif'

Following transformation calculates the 3rd highest unique date value when the OrderValue > 200:

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	kthlargestuniquedateif(Date, 3, OrderValue > 200)
Parameter: New column name	'kthlargestuniquedateif'

Results:

Date	Product	Units	UnitCost	OrderValue	kthlargestdate	kthlargestuniquedate	kthlargestdateif	kthlargestu
3/28/2020	ProductA	4	10.00	40.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/8/2020	ProductB	4	20.00	80.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/12/2020	ProductC	2	30.00	60.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/23/2020	ProductA	1	10.00	10.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/20/2020	ProductB	2	20.00	40.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/12/2020	ProductC	9	30.00	270.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020

3/28 /2020	ProductA	5	10.00	50.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/23 /2020	ProductB	8	20.00	160.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/16 /2020	ProductC	9	30.00	270.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/8 /2020	ProductA	5	10.00	50.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/10 /2020	ProductB	3	20.00	60.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/13 /2020	ProductC	1	30.00	30.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/12 /2020	ProductA	7	10.00	70.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/10 /2020	ProductB	7	20.00	140.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/24 /2020	ProductC	9	30.00	270.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/15 /2020	ProductA	8	10.00	80.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/10 /2020	ProductB	5	20.00	100.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020
3/10 /2020	ProductC	4	30.00	120.00	03-24-2020	03-23-2020	03-23-2020	03-23-2020