

PREPARE THE DATASETS

Team ID	PNT2022TMID20435
Project Name	Global Sales Data Analytics

DATA PREPARATION:

First understand and load the data.

The image shows the IBM Cognos Analytics with Watson interface. The top navigation bar includes the IBM logo, the text "IBM Cognos Analytics with Watson", a search bar, and user profile icons. The main content area features a welcome message: "Hello. Welcome to Cognos Analytics with Watson." Below this, there are two buttons: "Watch video" and "Take a product tour".

Below the welcome message, there is a "Quick launch" section with four tiles:

- Upload data**: Upload or drag and drop spreadsheets, csv files, and other data sources.
- Prepare data**: Use data modules to clean and connect data from multiple resources.
- Exploration**: Quickly find unbiased answers by identifying trends in your data with data explor...
- Present data**: Create sophisticated, multi-page, multi-query dashboards, reports, or story...

Below the quick launch section, there is a "Select sources" dialog box. The dialog box has a search bar and a list of files. The file "Global_Superstore2.xlsx" is selected. The "Filter by" section on the right shows the "Type" filter set to "All" and the "Modified" filter set to "All".

IBM Cognos Analytics with Watson

Sales module

11

Search content

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Properties

Data module

🔍 Search

Sales module

Navigation paths

Global_Su...ore2.xlsx

Row Id

Row ID

abc Order ID

🕒 Order Date

🕒 Ship Date

abc Ship Mode

abc Customer ID

abc Customer Name

abc Segment

📍 City

📍 State

📍 Country

Grid

Relationships

Custom tables

📊

Preview data

To preview data, select a table, a column in a table, or a folder that contains columns.

IBM Cognos Analytics with Watson

Sales module

11

Search content

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Global_Su...ore2.xlsx

Row Id

Row ID

abc Order ID

🕒 Order Date

🕒 Ship Date

abc Ship Mode

abc Customer ID

abc Customer Name

abc Segment

📍 City

📍 State

📍 Country

Grid

Relationships

Custom tables

Row Id	Row ID	Order ID	Order Date	Ship Date	Ship Mode
1	32298	CA-2012-124891	31-07-2012	31-07-2012	Same Day
2	26341	IN-2013-77878	05-02-2013	07-02-2013	Second Class
3	25330	IN-2013-71249	17-10-2013	18-10-2013	First Class
4	13524	ES-2013-1579342	28-01-2013	30-01-2013	First Class
5	47221	SG-2013-4320	05-11-2013	06-11-2013	Same Day
6	22732	IN-2013-42360	28-06-2013	01-07-2013	Second Class
7	30570	IN-2011-81826	07-11-2011	09-11-2011	First Class
8	31192	IN-2012-86369	14-04-2012	18-04-2012	Standard Class
9	40155	CA-2014-135909	14-10-2014	21-10-2014	Standard Class

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Properties

Data module

🔍 Search

Sales module

Navigation paths

Global_Su...ore2.xlsx

Row Id

Row ID

abc Order ID

🕒 Order Date

🕒 Ship Date

abc Ship Mode

abc Customer ID

abc Customer Name

abc Segment

📍 City

📍 State

📍 Country

📍 Postal Code

Grid

Relationships

Custom tables

Global_Superstore2.xlsx

Diagram settings

Cardinality

Focus mode

Degrees of separation: 1

1

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🔍

🔄

🔍

IBM Cognos Analytics with Watson | Sales module

Search content

Properties

Data module

Grid Relationships Custom tables

Search

Row ID

Order ID

Order Date

Ship Date

Ship Mode

Customer ID

Customer Name

Segment

City

State

Country

Postal Code

Market

Region

Product ID

Category

Row ID	Row ID	Order ID	Order Date	Ship Date	Ship Mode
1	3229	4891	31-07-2012	31-07-2012	Same Day
2	2634	378	05-02-2013	07-02-2013	Second Class
3	2533	249	17-10-2013	18-10-2013	First Class
4	1352	79342	28-01-2013	30-01-2013	First Class
5	4722	20	05-11-2013	06-11-2013	Same Day
6	2273	360	28-06-2013	01-07-2013	Second Class
7	3057	326	07-11-2011	09-11-2011	First Class
8	31192	IN-2012-86369	14-04-2012	18-04-2012	Standard Class
9	40155	CA-2014-135909	14-10-2014	21-10-2014	Standard Class

Filter...

Create calculation...

Create data group...

Create navigation path...

Hide from users

Remove

Format data...

Clean...

Sort descending

Sort ascending

Properties

IBM Cognos Analytics with Watson | * New data module

Search content

Maintenance: Scheduled maintenance completed. Click More Info for details and to subscribe to future events

Dismiss More info

Properties

Data module

Grid Relationships Custom tables

Search

Order ID

Order Date

Ship Date

Ship Mode

Customer ID

Customer Name

Segment

City

State

Country

Postal Code

Market

Region

Product ID

Category

Sub-Category

Row ID	Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID
1	32298	CA-2012-116638	2012-07-31	2012-07-31	Same Day	RH-19495
2	26341	IN-2012-86369	2013-02-07	2013-02-07	Second Class	JR-16210
3	25330	IN-2013-1070	2013-10-18	2013-10-18	First Class	CR-12730
4	13524	ES-2013-0130	2013-01-30	2013-01-30	First Class	KM-16375
5	47221	SG-2013-1106	2013-11-06	2013-11-06	Same Day	RH-9495
6	22732	IN-2013-0701	2013-07-01	2013-07-01	Second Class	JM-15655
7	30570	IN-2011-1109	2011-11-09	2011-11-09	First Class	TS-21340
8	31192	IN-2012-86369	2012-04-14	2012-04-18	Standard Class	MB-18085
9	40155	CA-2014-135909	2014-10-14	2014-10-21	Standard Class	JW-15220
10	40936	CA-2012-116638	2012-01-28	2012-01-31	Second Class	JH-15985

Filter...

Create calculation...

Create data group...

Create navigation path...

Split...

Hide from users

Remove

Format data...

Clean...

Sort descending

Sort ascending

Properties

IBM Cognos Analytics with Watson | * New data module

Search content

Properties

Data module

Grid Relationships Custom tables

Search

Order ID

Order Date

Ship Date

Ship Mode

Customer ID

Customer Name

Segment

City

State

Country

Postal Code

Market

Region

Product ID

Category

Sub-Category

Product Name

Filter - Order ID

Add a filter condition +

Search

☐ AE-2011-9160

☐ AE-2013-1130

☐ AE-2013-1530

☐ AE-2014-2840

☐ AE-2014-3830

☐ AE-2014-4120

☐ AG-2011-1070

☐ AG-2011-1390

Clear all

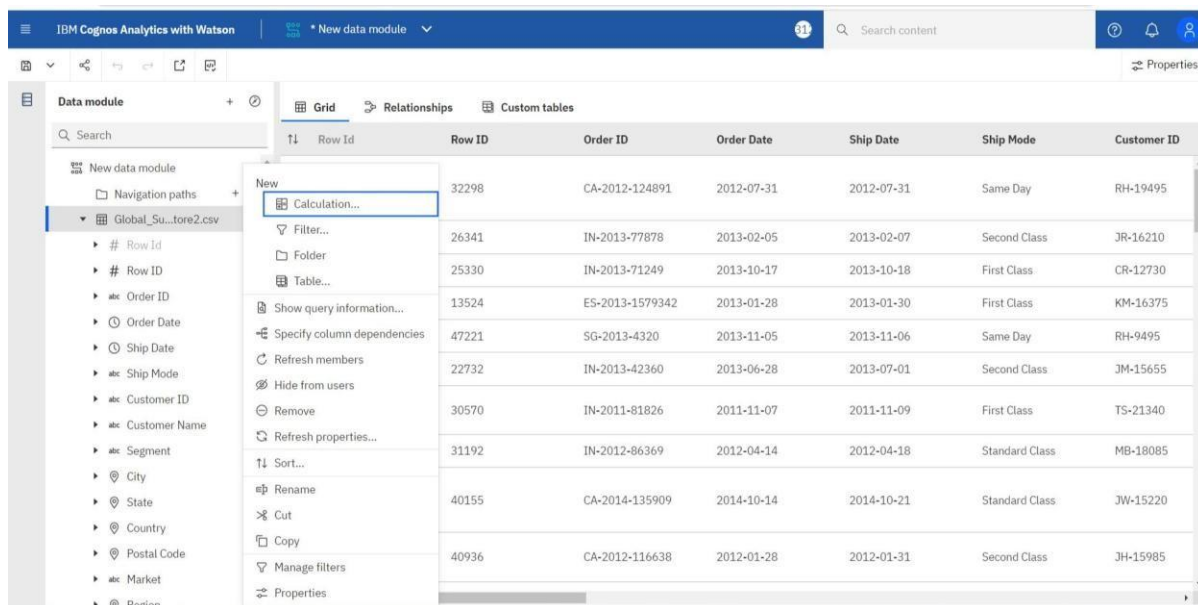
Invert

Cancel OK

Row ID	Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID
1	32298	CA-2012-116638	2012-07-31	2012-07-31	Same Day	RH-19495
2	26341	IN-2012-86369	2013-02-07	2013-02-07	Second Class	JR-16210
3	25330	IN-2013-1070	2013-10-18	2013-10-18	First Class	CR-12730
4	13524	ES-2013-0130	2013-01-30	2013-01-30	First Class	KM-16375
5	47221	SG-2013-1106	2013-11-06	2013-11-06	Same Day	RH-9495
6	22732	IN-2013-0701	2013-07-01	2013-07-01	Second Class	JM-15655
7	30570	IN-2011-1109	2011-11-09	2011-11-09	First Class	TS-21340
8	31192	IN-2012-86369	2012-04-14	2012-04-18	Standard Class	MB-18085
9	40155	CA-2014-135909	2014-10-14	2014-10-21	Standard Class	JW-15220
10	40936	CA-2012-116638	2012-01-28	2012-01-31	Second Class	JH-15985

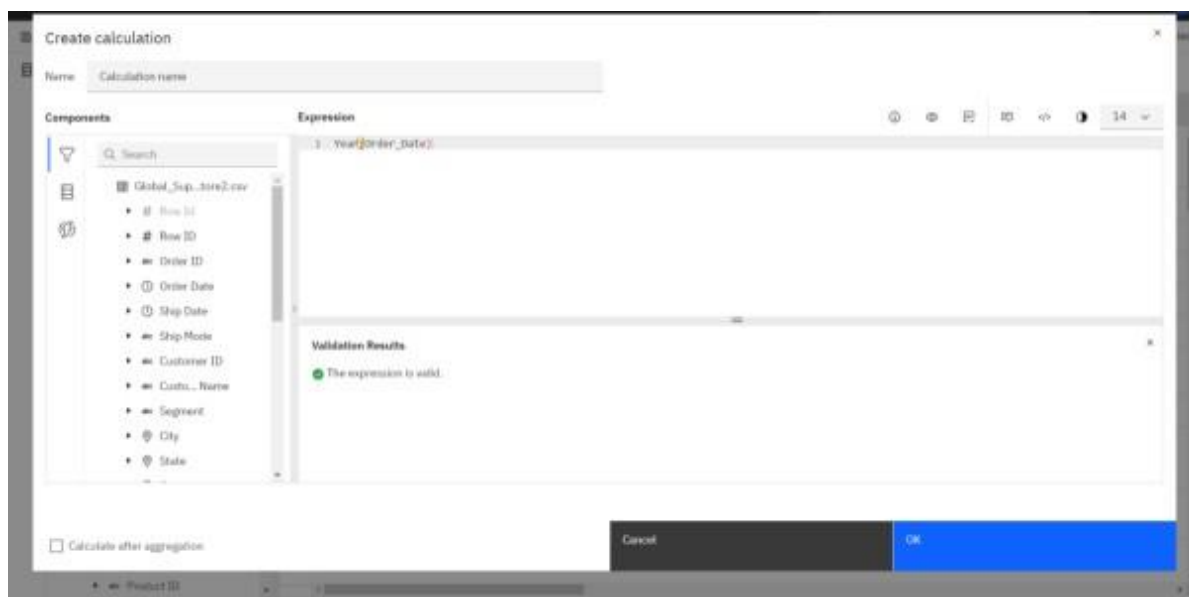
Once cleaned, the data is saved.

Once you load the data, we need to Prepare the data.



The screenshot shows the IBM Cognos Analytics interface. On the left, the 'Data module' pane displays a tree view of the data source 'Global_Sup...tore2.csv' with fields like Row ID, Order ID, Ship Date, Ship Mode, Customer ID, Segment, City, State, Country, Postal Code, Market, and Division. A context menu is open over the grid, showing options such as 'New', 'Calculation...', 'Filter...', 'Folder', 'Table...', 'Show query information...', 'Specify column dependencies', 'Refresh members', 'Hide from users', 'Remove', 'Refresh properties...', 'Sort...', 'Rename', 'Cut', 'Copy', 'Manage filters', and 'Properties'. The main grid displays data with columns: Row ID, Order ID, Order Date, Ship Date, Ship Mode, and Customer ID. The data includes rows for various orders, such as Order ID CA-2012-124891 with Ship Date 2012-07-31 and Ship Mode Same Day.

Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID
32298	CA-2012-124891	2012-07-31	2012-07-31	Same Day	RH-19495
26341	IN-2013-77878	2013-02-05	2013-02-07	Second Class	JR-16210
25330	IN-2013-71249	2013-10-17	2013-10-18	First Class	CR-12730
13524	ES-2013-1579342	2013-01-28	2013-01-30	First Class	KM-16375
47221	SG-2013-4320	2013-11-05	2013-11-06	Same Day	RH-9495
22732	IN-2013-42360	2013-06-28	2013-07-01	Second Class	JM-15655
30570	IN-2011-81826	2011-11-07	2011-11-09	First Class	TS-21340
31192	IN-2012-86369	2012-04-14	2012-04-18	Standard Class	MB-18085
40155	CA-2014-135909	2014-10-14	2014-10-21	Standard Class	JW-15220
40936	CA-2012-116638	2012-01-28	2012-01-31	Second Class	JH-15985



The screenshot shows the 'Create calculation' dialog box. The 'Name' field is set to 'Calculation name'. The 'Components' pane on the left shows the same tree view of the data source. The 'Expression' field contains the formula '1 - Year([Order_Date])'. Below the expression field, the 'Validation Results' section shows a green checkmark and the message 'The expression is valid.' At the bottom, there are 'Cancel' and 'OK' buttons. A checkbox labeled 'Calculate after aggregation' is also present.

Name: Calculation name

Components:

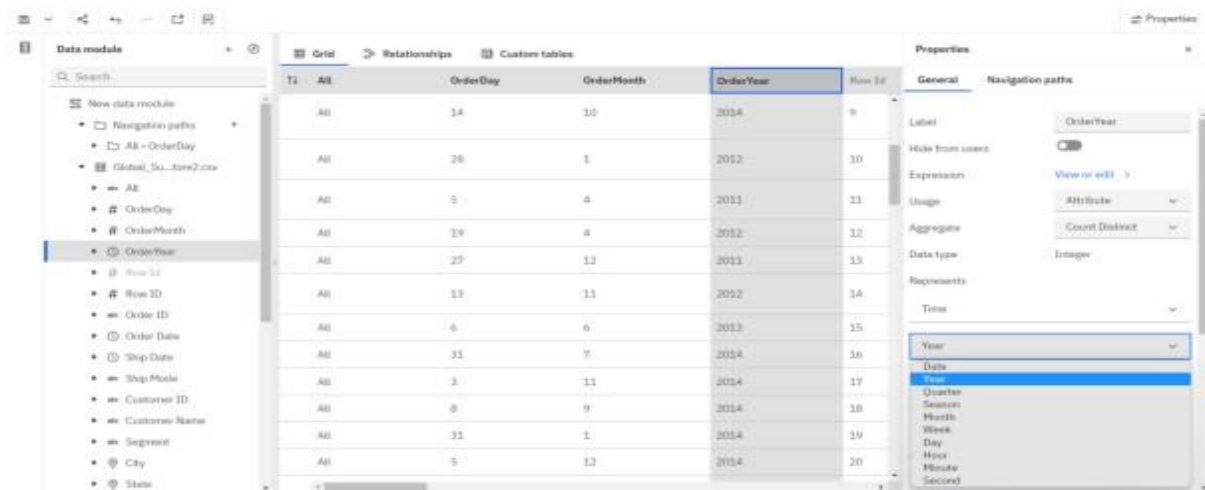
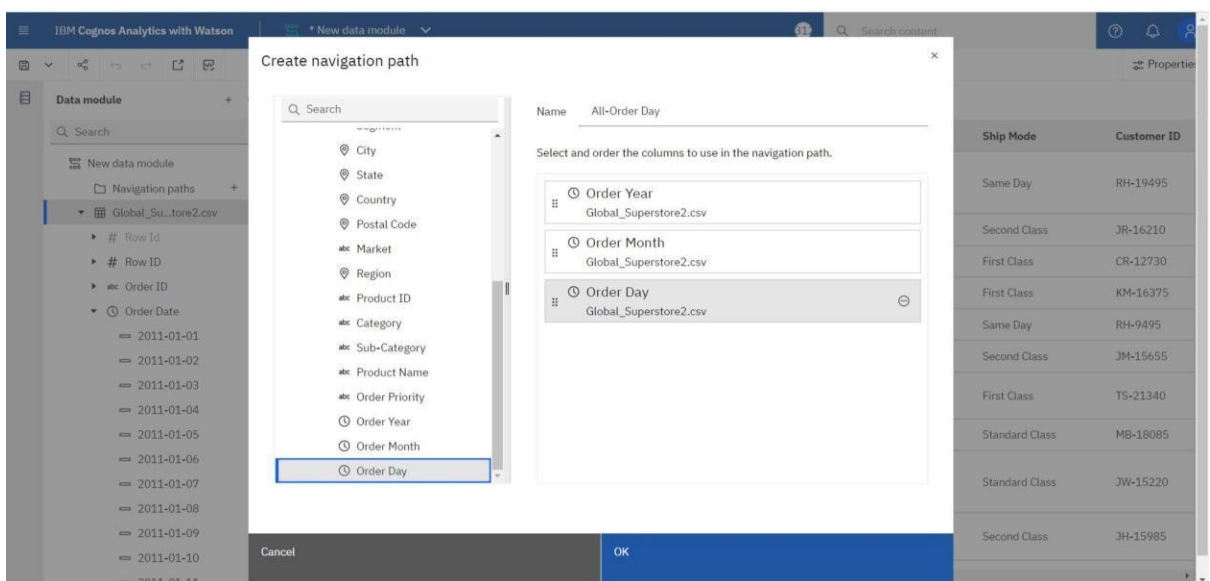
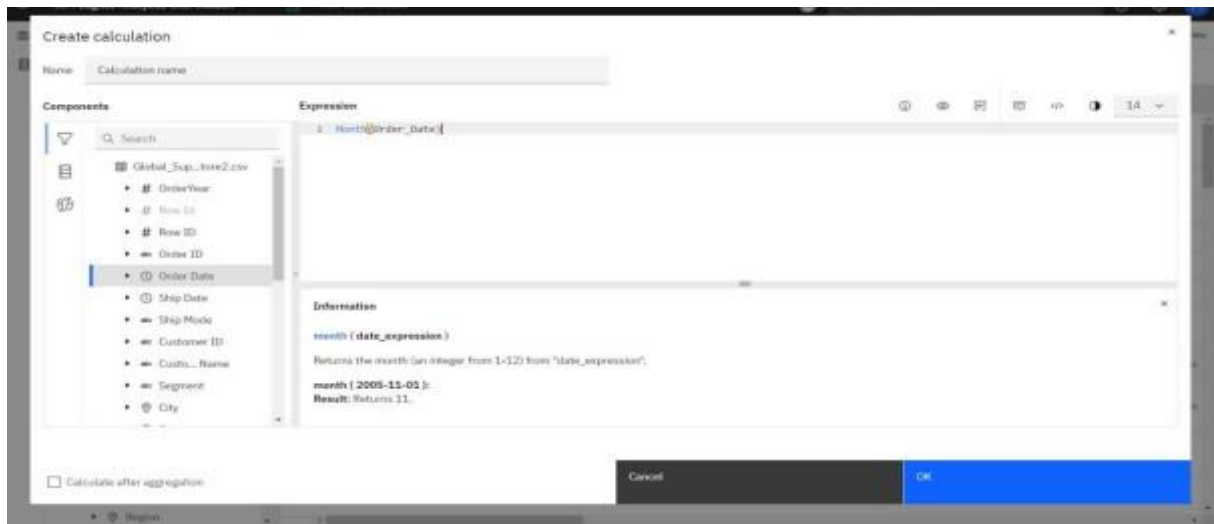
- Global_Sup...tore2.csv
 - Row ID
 - Order ID
 - Order Date
 - Ship Date
 - Ship Mode
 - Customer ID
 - Customer Name
 - Segment
 - City
 - State

Expression: 1 - Year([Order_Date])

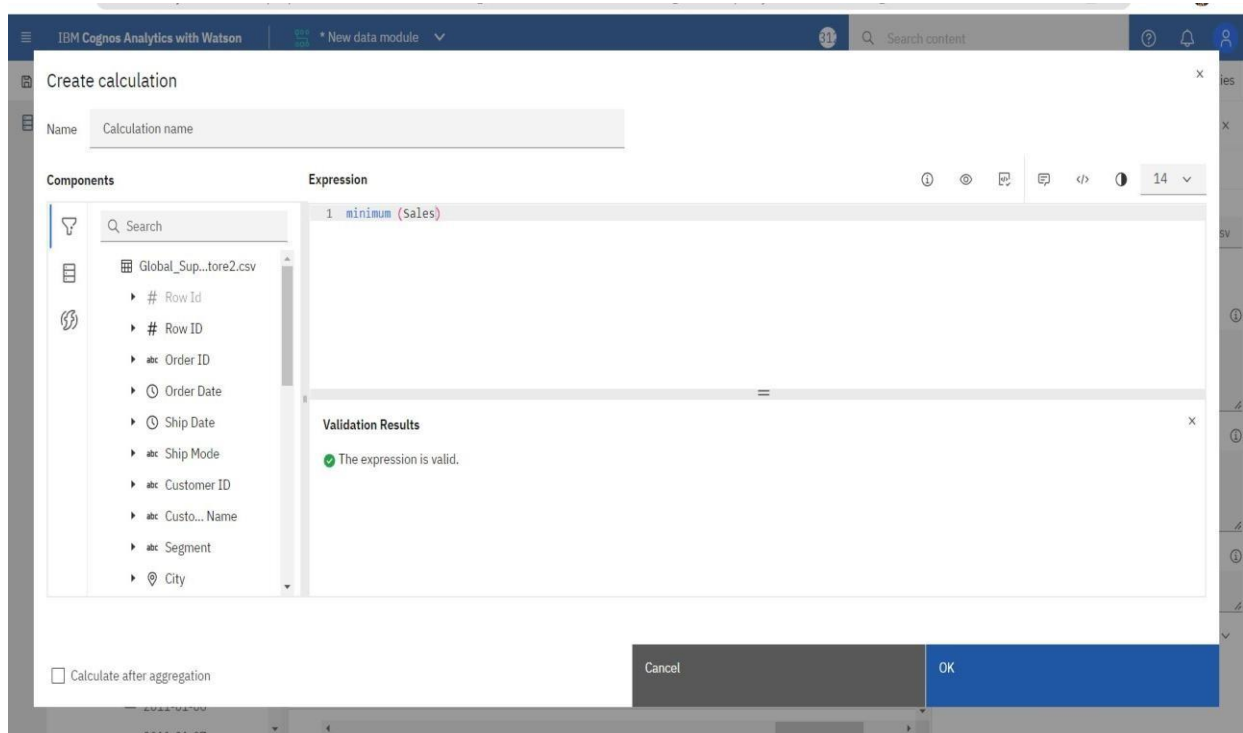
Validation Results: The expression is valid.

☐ Calculate after aggregation

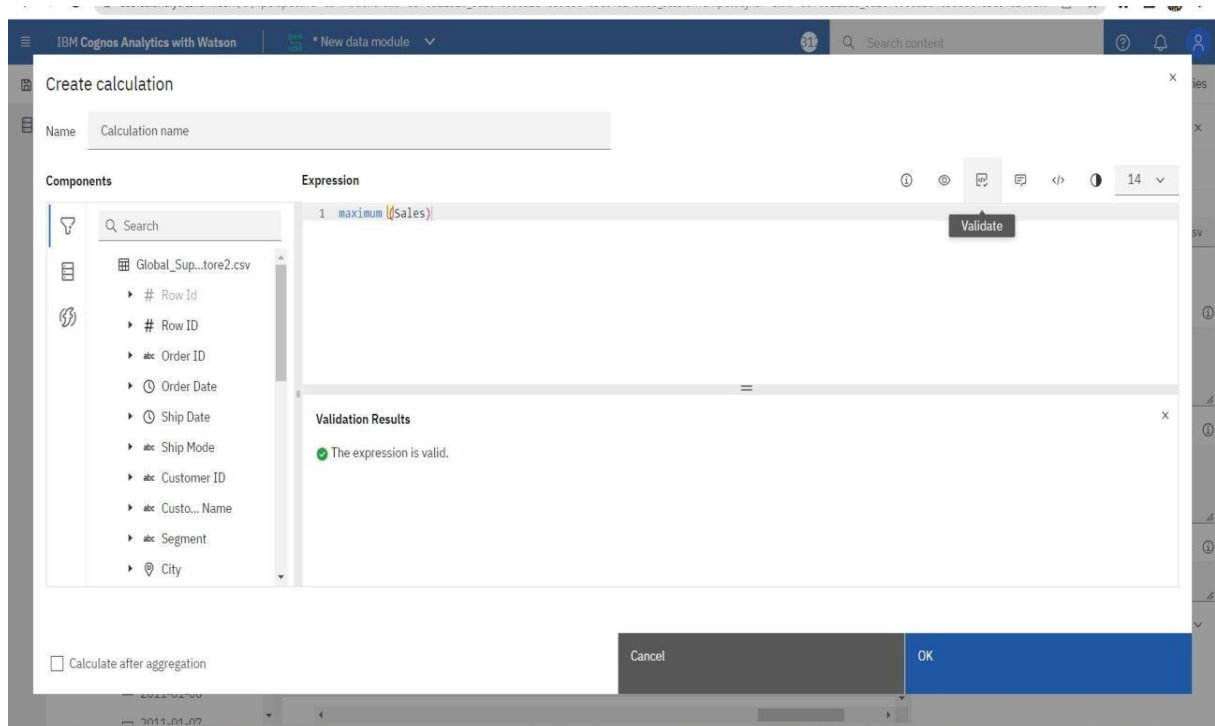
Buttons: Cancel, OK



Minimum(Sales):



Maximum(Sales):



Average (Sales):

