

# PROJECT DEVELOPMENT PHASE

## SPRINT-III

<b>Date</b>	<b>11 November 2022</b>
<b>Team ID</b>	<b>PNT2022TMID05235</b>
<b>Project Name</b>	<b>Global Sales Data Analytics</b>
<b>Mark</b>	<b>4 Mark</b>

### DATA PREPARATION

1. First understand and load the data.

The screenshot displays the IBM Cognos Analytics user interface. At the top, a blue header bar contains the text 'IBM Cognos Analytics with Watson', a 'Content' dropdown menu, a search bar with the placeholder 'Search content', and user profile icons. Below the header, a dark blue banner indicates 'Maintenance: Scheduled maintenance completed. Click More Info for details and to subscribe to future events'. The main section is titled 'Content' and includes a 'New +' button. Underneath, there are tabs for 'My content', 'Team content', and 'Samples'. A table lists the content items:

1 item selected		More +	Create v	Details i	Delete	Cancel
	Name	Type	Last Accessed			
<input type="checkbox"/>	Pharma Dashboard	Folder	9/27/2022, 1:05 AM			
<input type="checkbox"/>	50_Startups.csv	Uploaded file	9/13/2022, 12:08 AM			
<input type="checkbox"/>	bank.csv	Uploaded file	9/15/2022, 8:27 AM			
<input type="checkbox"/>	bikebuyer.csv	Uploaded file	9/13/2022, 12:20 AM			
<input checked="" type="checkbox"/>	Global_Superstore2.csv	Uploaded file	10/11/2022, 4:07 AM			
<input type="checkbox"/>	Global_Superstore2.xlsx	Unloaded file	10/11/2022, 4:04 AM			

2. Since there is only single file, there need not be relationships or custom tables for the data.

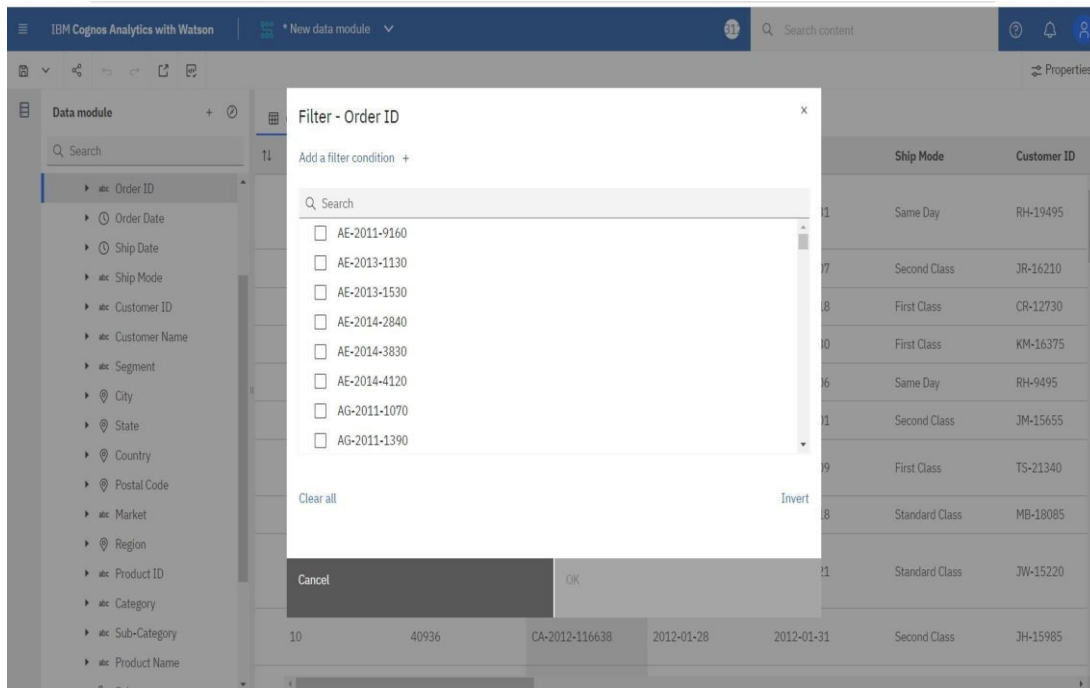
The screenshot shows the IBM Cognos Analytics interface. The top navigation bar includes the logo, a search bar, and a user profile icon. A maintenance message is displayed below the navigation bar. The main area is divided into a left sidebar and a central grid view. The sidebar, titled 'Data module', contains a search bar and a list of data sources, including 'Global\_Su...tore2.csv'. The central grid view displays a table with 10 rows and 8 columns: Row Id, Row ID, Order ID, Order Date, Ship Date, Ship Mode, and Customer ID. The data is sorted by Row ID in ascending order.

Row Id	Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID
1	32298	CA-2012-124891	2012-07-31	2012-07-31	Same Day	RH-19495
2	26341	IN-2013-77878	2013-02-05	2013-02-07	Second Class	JR-16210
3	25330	IN-2013-71249	2013-10-17	2013-10-18	First Class	CR-12730
4	13524	ES-2013-1579342	2013-01-28	2013-01-30	First Class	KM-16375
5	47221	SG-2013-4320	2013-11-05	2013-11-06	Same Day	RH-9495
6	22732	IN-2013-42360	2013-06-28	2013-07-01	Second Class	JM-15655
7	30570	IN-2011-81826	2011-11-07	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-15085

3. To prepare the data, we need to verify it is clean. There must be no null values. If there are null values, there will be empty data.

The screenshot shows the IBM Cognos Analytics interface, similar to the previous one, but with a context menu open over the 'Order ID' column. The menu options include: Filter..., Create data group..., Create navigation path..., Split..., Hide from users, Remove, Format data..., Clean..., Sort descending, Sort ascending, and Properties. The data table is the same as in the previous screenshot.

Row Id	Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID
1	32298	CA-2012-124891	2012-07-31	2012-07-31	Same Day	RH-19495
2	26341	IN-2013-77878	2013-02-05	2013-02-07	Second Class	JR-16210
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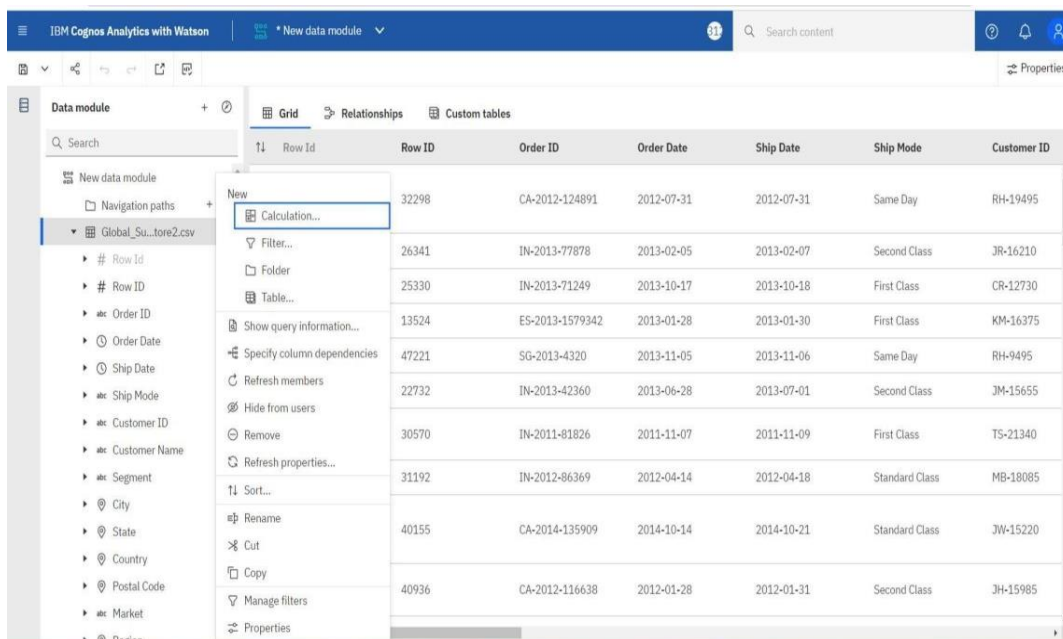


2. Once cleaned, the data is saved.

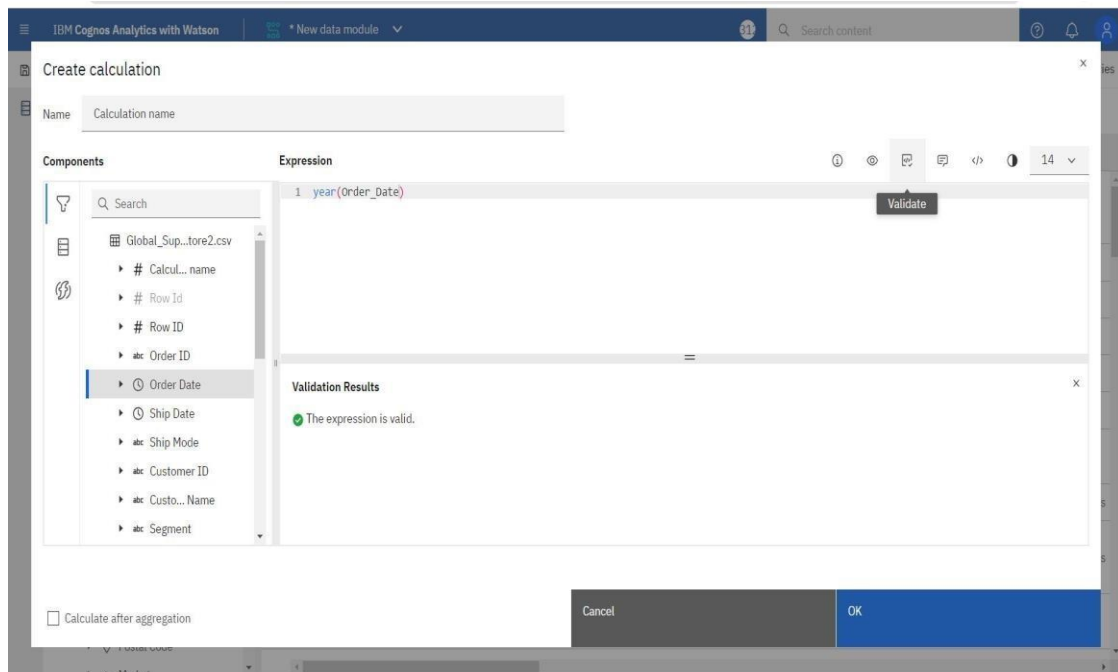
## DATE CALCULATIONS AND NAVIGATION PATHS

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

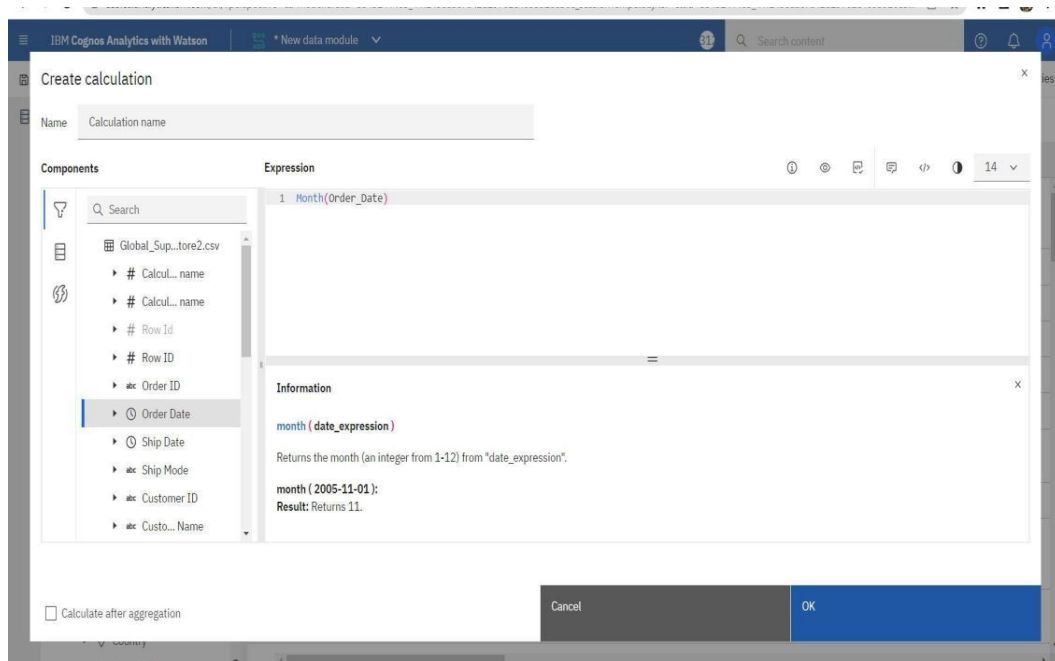
- Prepare Calculations of Year, Month, Day fields and also the related Navigation path
- Create a Few more Calculations – Target Sales, Min Sales, Max Sales, Middle Range Sales.



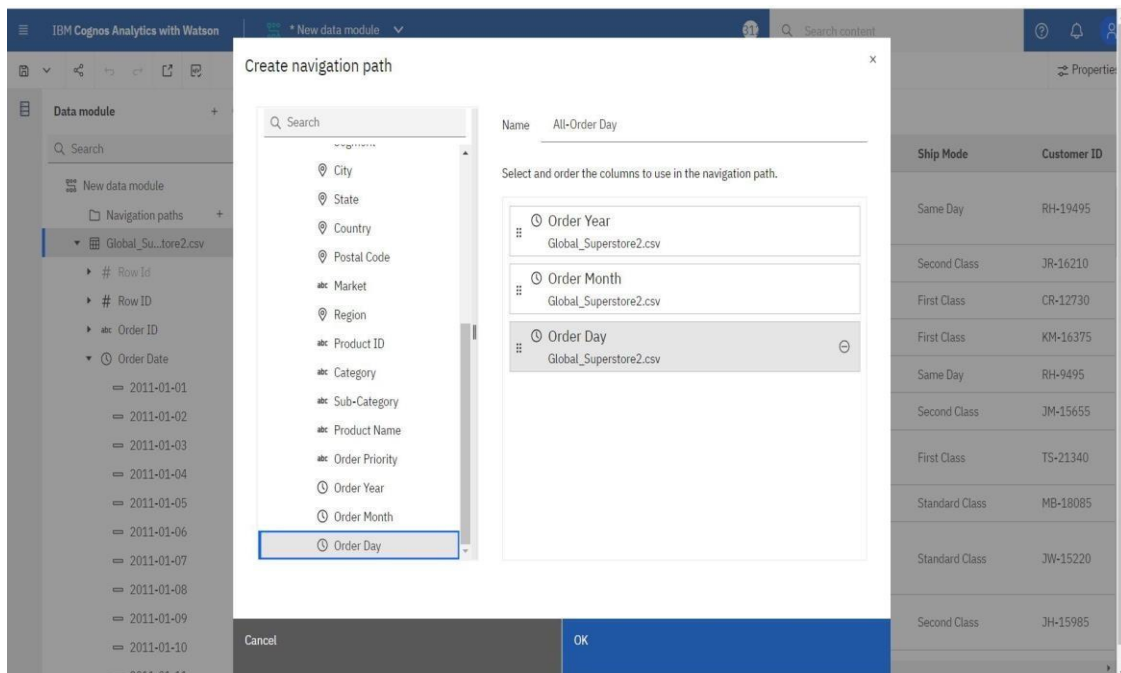
1. Right click> calculation> type expression> validate> Set Name as 'Order Year'



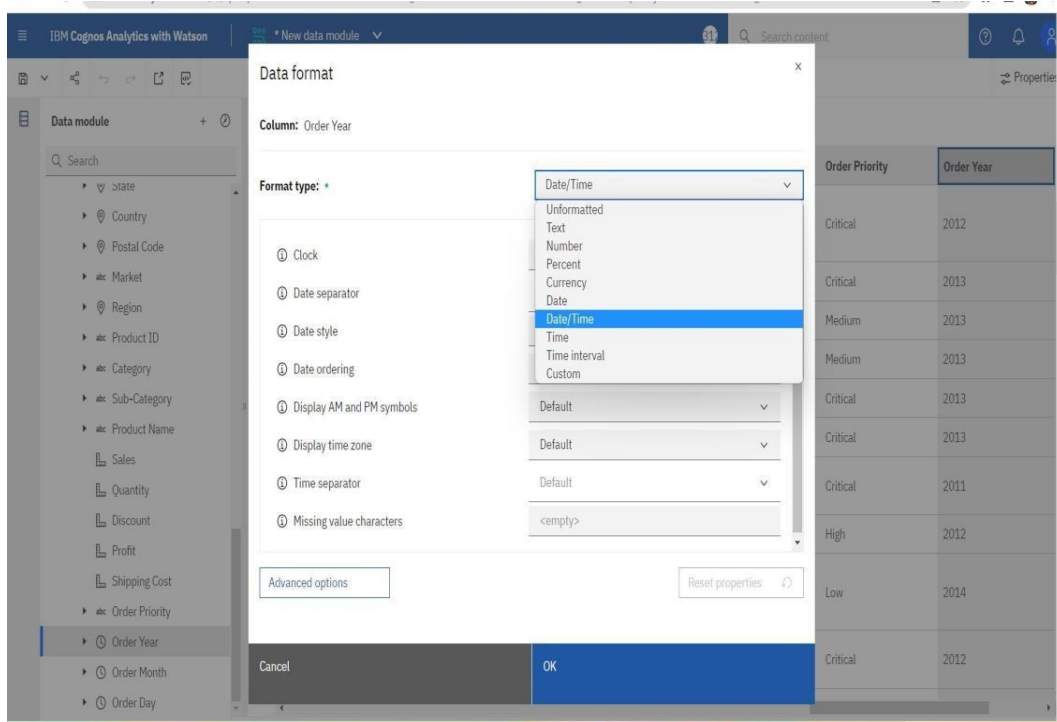
2. Similarly, 'OrderMonth', 'OrderDay' and 'All'  
OrderYear -> Year (Order\_Date)  
OrderMonth -> Month (Order\_Date)  
OrderDay -> Day (Order\_Date)  
All -> All



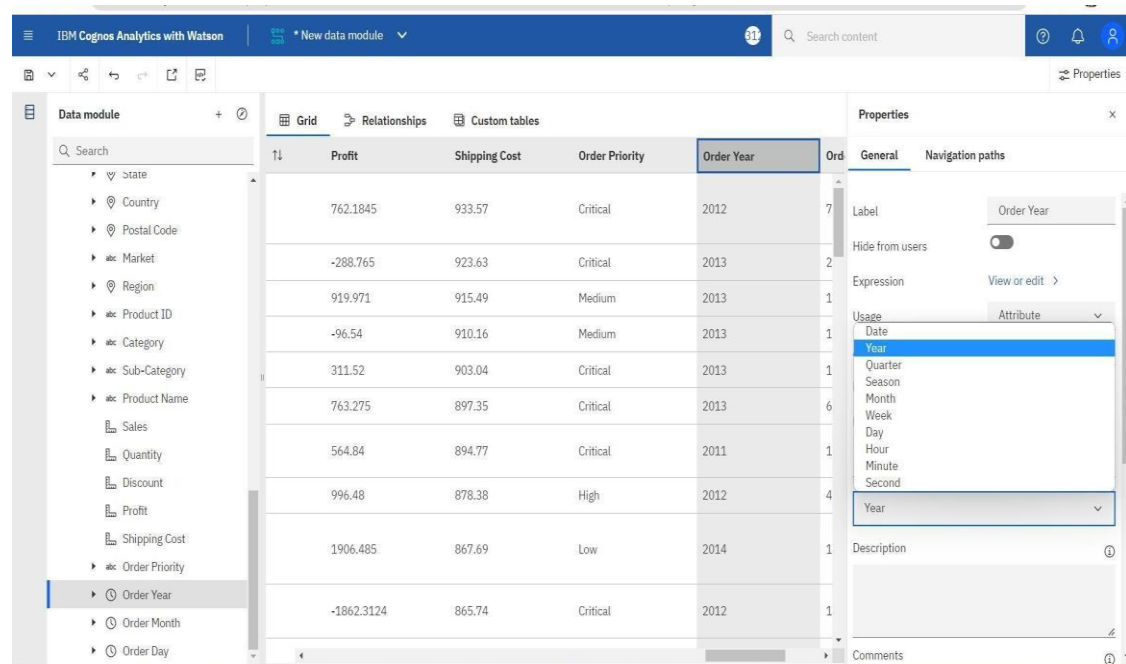
### 3. Right click on create navigation path



### 4. Data format > Date/Time



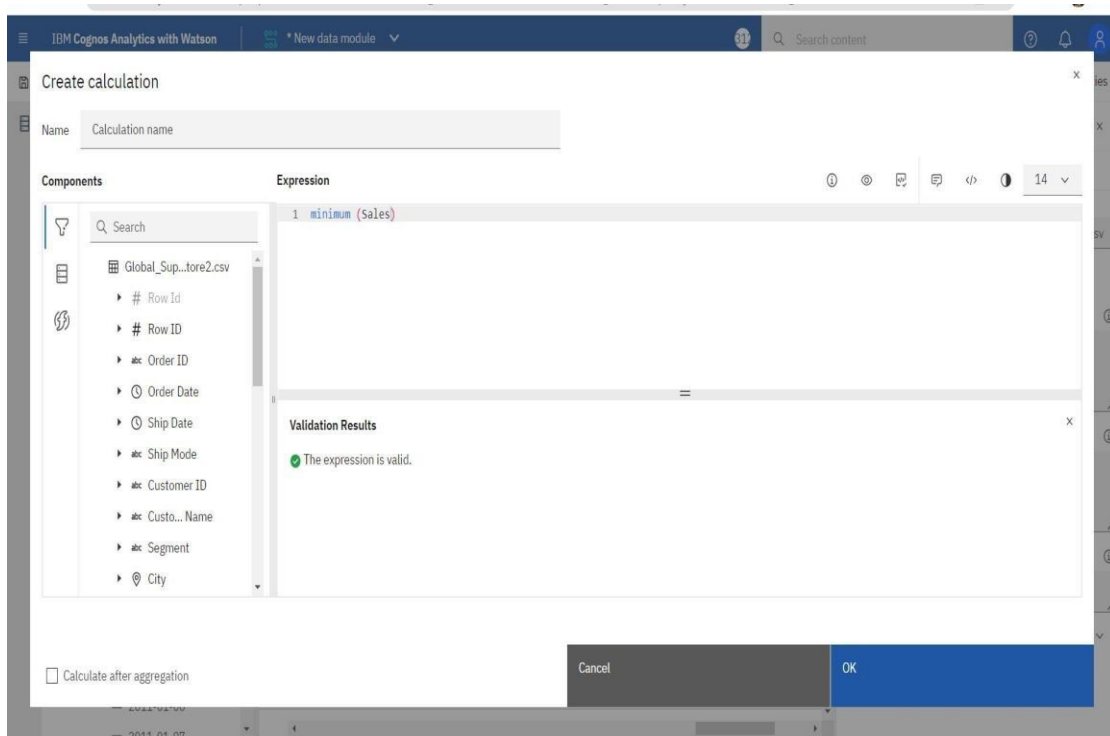
5. Properties> Usage-> Attribute  
 Aggregate-> Count Distinct  
 Data Type-> Integer  
 Represents-> Time, (Year, Month, Day Respectively)  
 Display Options-> Show Members  
 This way it becomes a Numerical data Type



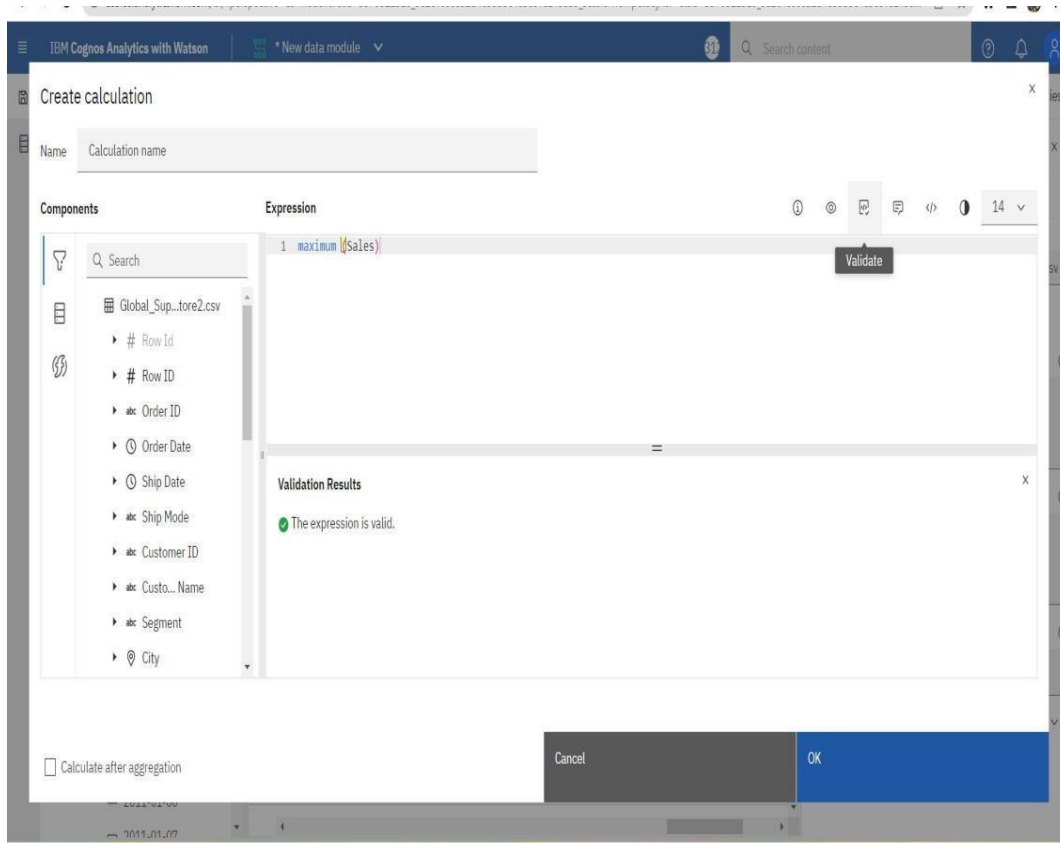
6. Hence calculations for day, month and year are completed.  
 Once you load the data, we need to Prepare the data.  
 a. Prepare Calculations of Year, Month, Day fields and also the related Navigation path  
 b. **Create a Few more Calculations – Target Sales, Min Sales, Max Sales, Middle Range Sales.**

7. Similarly, calculations for Target sales, Min sales, Max Sales and Middle range sales are done  
 Min sales-> minimum (Sales)  
 Max sales, Target sales-> maximum (Sales)  
 Middle range sales-> average (Sales)

**Minimum(Sales)**



## Maximum(Sales)



## Middle Range (Sales)

