

PREPARE THE DATASETS

Team ID	PNT2022TMID15658
Project Name	Global Sales Data Analytics

DATA PREPARATION

1. First understand and load the data.

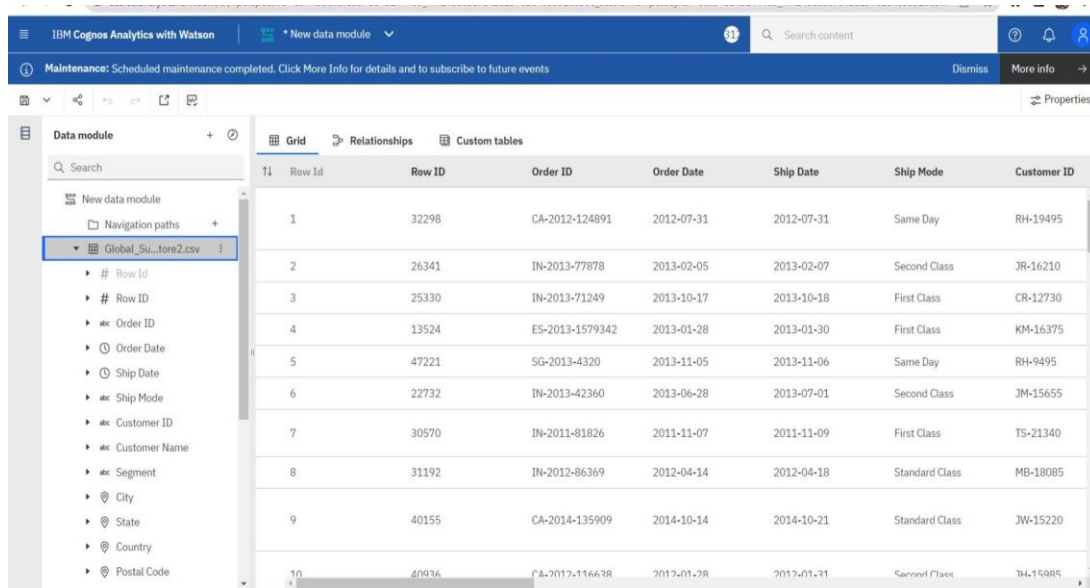
The screenshot shows the IBM Cognos Analytics with Watson dashboard. The browser address bar displays `us1.ca.analytics.ibm.com/bi/?perspective=home`. The dashboard header includes the title "IBM Cognos Analytics with Watson", a search bar, and a user profile for "DEEPAK K (577cc27637f9)". A blue banner at the top indicates "Maintenance: Scheduled maintenance completed. Click More Info for details and to subscribe to future events". The main content area features a welcome message: "Hello. Welcome to Cognos Analytics with Watson. You can get started right away by taking a look at our introduction video, product tour and Getting Started tab." Below this are two buttons: "Watch video" and "Take a product tour". To the right is a sidebar menu with options: "My schedules and subscriptions", "Log my session", "About", "Manage product subscription", "Privacy", "Cookie Preferences", "IBM Cognos Analytics Mobile", and "Log out". At the bottom, a "Quick launch" section contains four tiles: "Upload data" (with an upload icon), "Prepare data" (with a data module icon), "Exploration" (with a magnifying glass icon), and "Present data" (with a presentation icon). Each tile includes a brief description of the functionality.

Content

My content Team content Samples

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

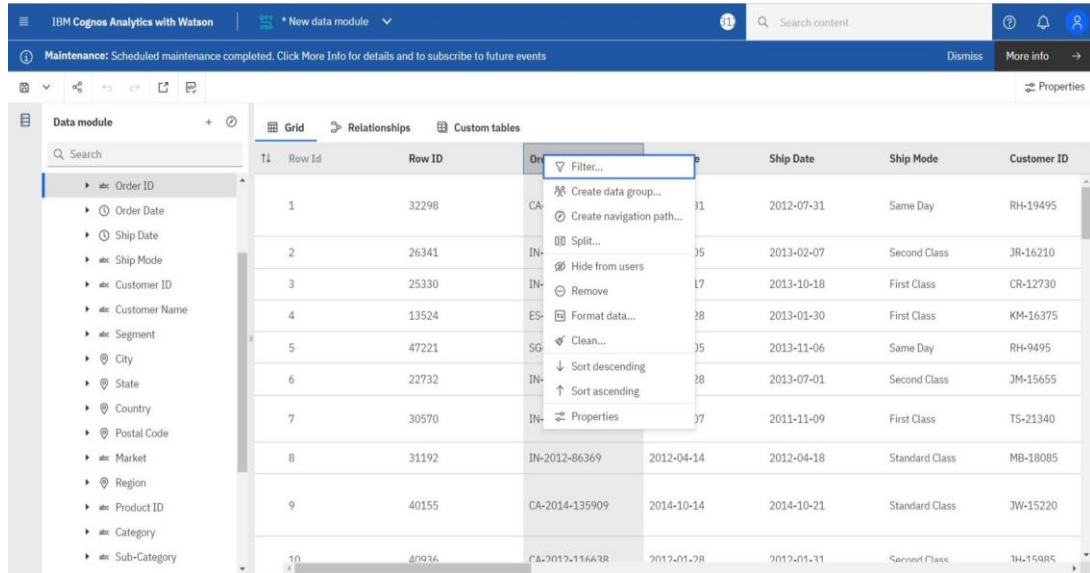
2. Since there is only single file, there need not be relationships or custom tables for the data.



The screenshot shows the IBM Cognos Analytics interface. The top navigation bar includes the title 'IBM Cognos Analytics with Watson', a 'New data module' dropdown, a search bar, and a maintenance notification. The left sidebar shows the 'Data module' structure with a search bar and a list of fields: Row ID, Order ID, Order Date, Ship Date, Ship Mode, Customer ID, Customer Name, Segment, City, State, Country, and Postal Code. The main area displays a grid view of the data with columns: Row ID, Order ID, Order Date, Ship Date, Ship Mode, and Customer ID. The data is organized into 10 rows.

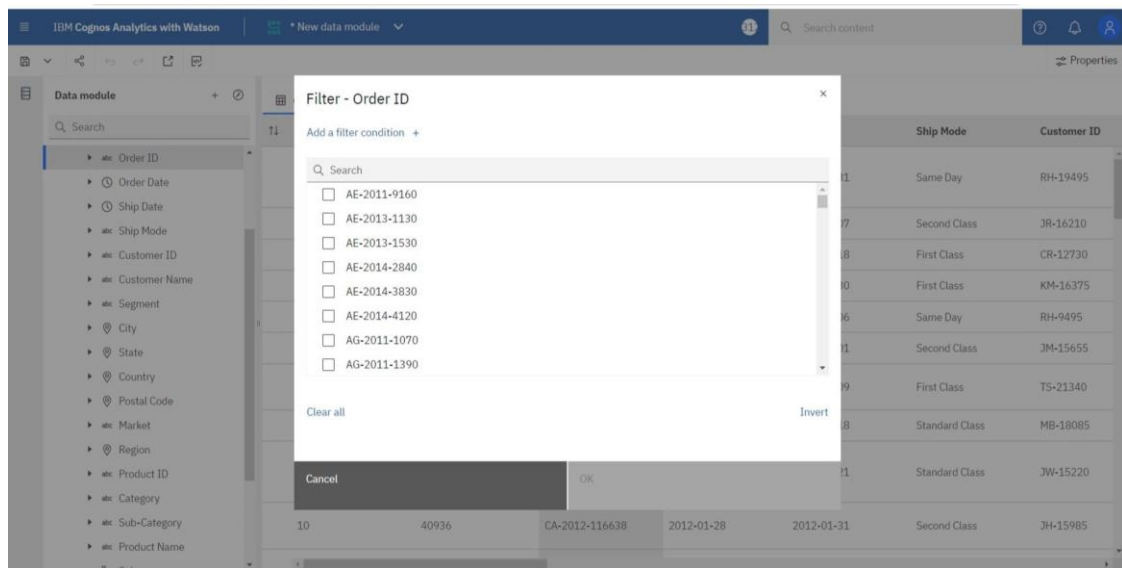
Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID
1	CA-2012-124891	2012-07-31	2012-07-31	Same Day	RH-19495
2	IN-2013-77878	2013-02-05	2013-02-07	Second Class	JR-16210
3	IN-2013-71249	2013-10-17	2013-10-18	First Class	CR-12730
4	ES-2013-1579342	2013-01-28	2013-01-30	First Class	KM-16375
5	SG-2013-4320	2013-11-05	2013-11-06	Same Day	RH-9495
6	IN-2013-42360	2013-06-28	2013-07-01	Second Class	JM-15655
7	IN-2011-81826	2011-11-07	2011-11-09	First Class	TS-21340
8	IN-2012-86369	2012-04-14	2012-04-18	Standard Class	MB-18085
9	CA-2014-135909	2014-10-14	2014-10-21	Standard Class	JW-15220
10	IN-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 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	Order ID	Order Date	Ship Date	Ship Mode	Customer ID
1	CA-2012-124891	2012-07-31	2012-07-31	Same Day	RH-19495
2	IN-2013-77878	2013-02-05	2013-02-07	Second Class	JR-16210
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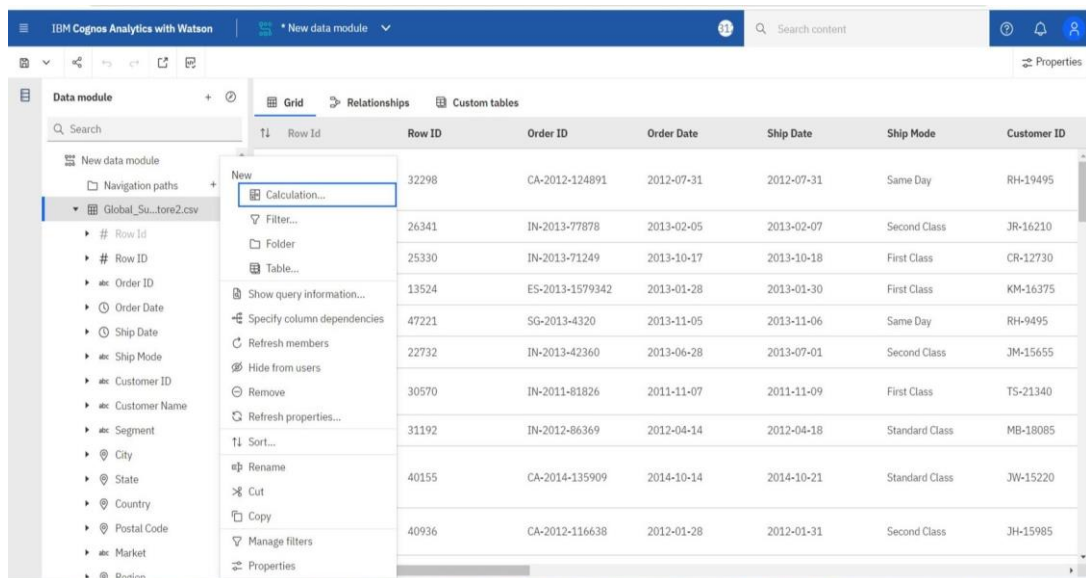


3. Once cleaned, the data is saved.

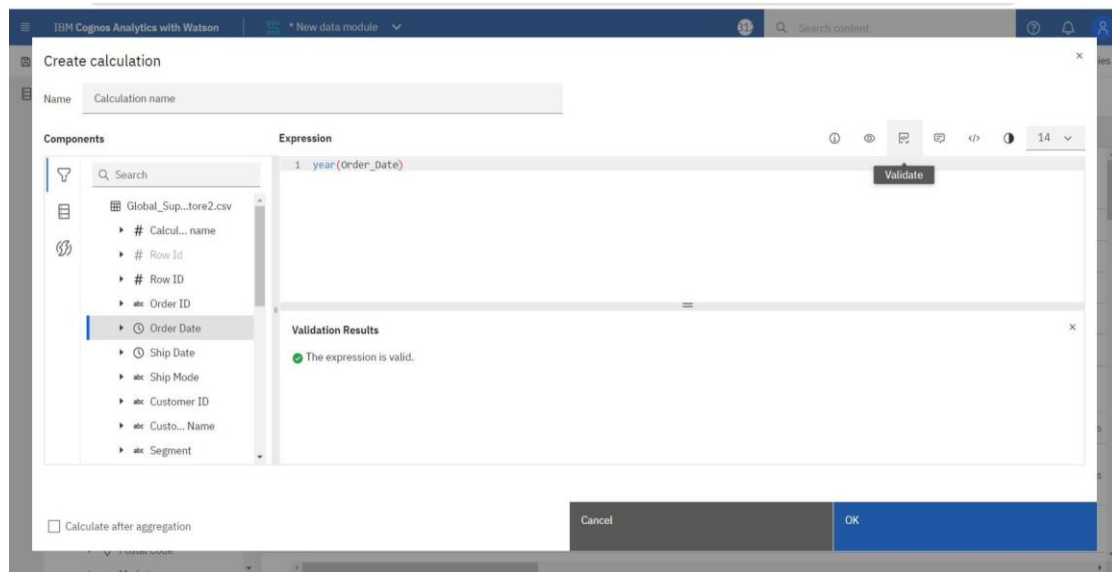
DATE CALCULATIONS AND NAVIGATION PATHS

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

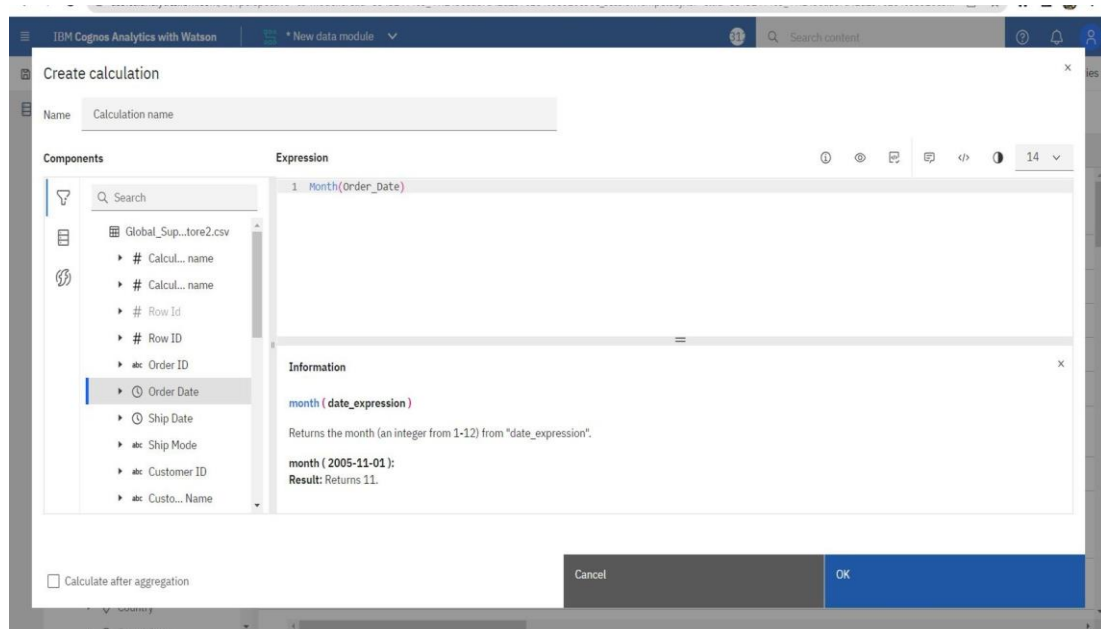
- Prepare Calculations of Year, Month, Day fields and also the related Navigation path
- Create a Few more Calculations – Target Sales, Min Sales, Max Sales, Middle Range Sales.



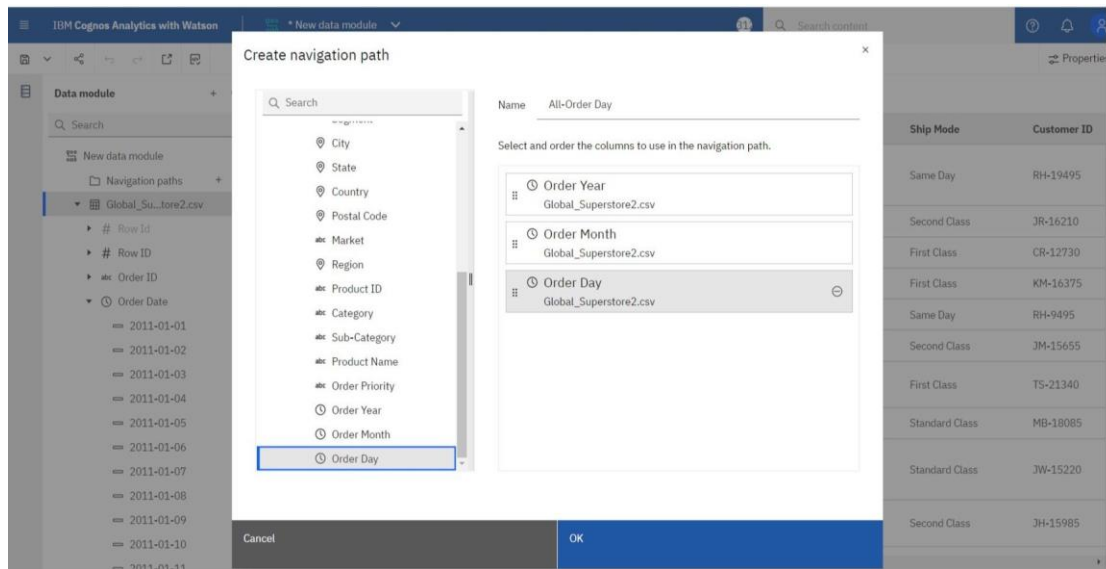
1. Right click> calculation> type expression> validate> Set Name as 'Order Year'



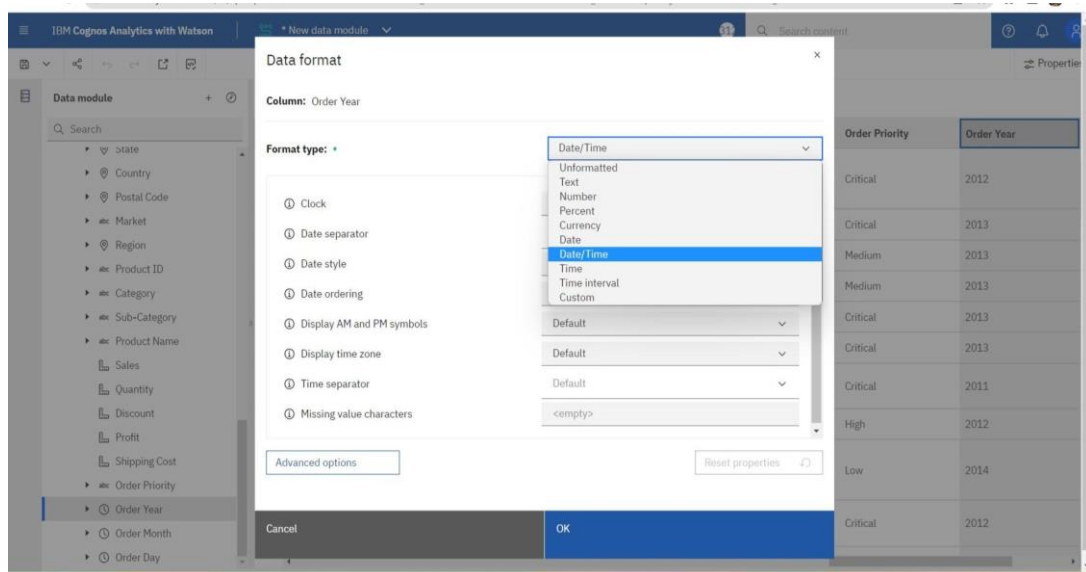
2. Similarly, 'OrderMonth', 'OrderDay' and 'All'
OrderYear -> Year (Order_Date)
OrderMonth -> Month (Order_Date)
OrderDay -> Day (Order_Date)
All -> All



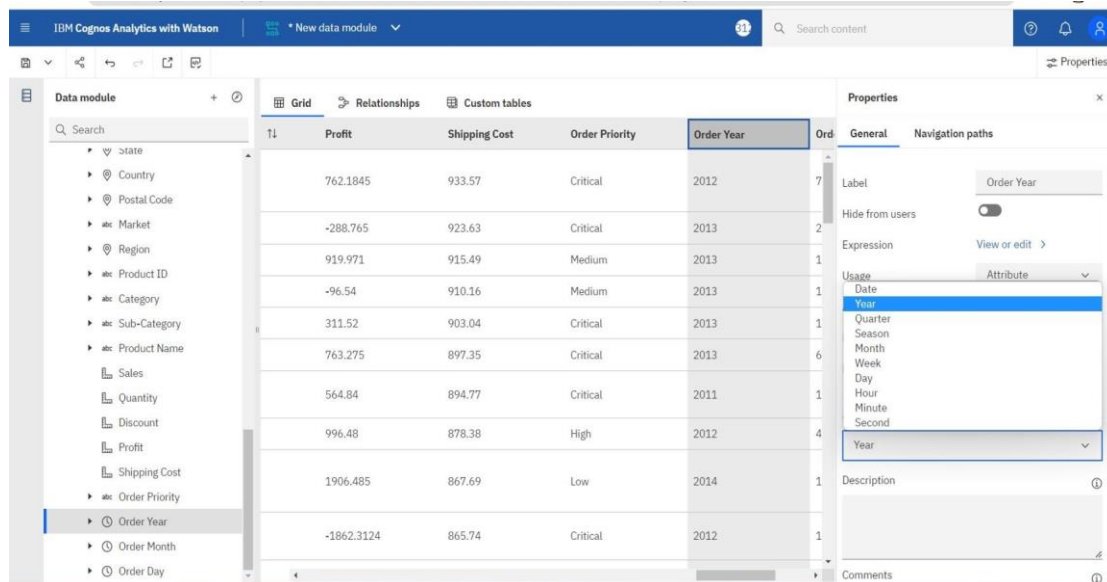
3. Right click on create navigation path



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.

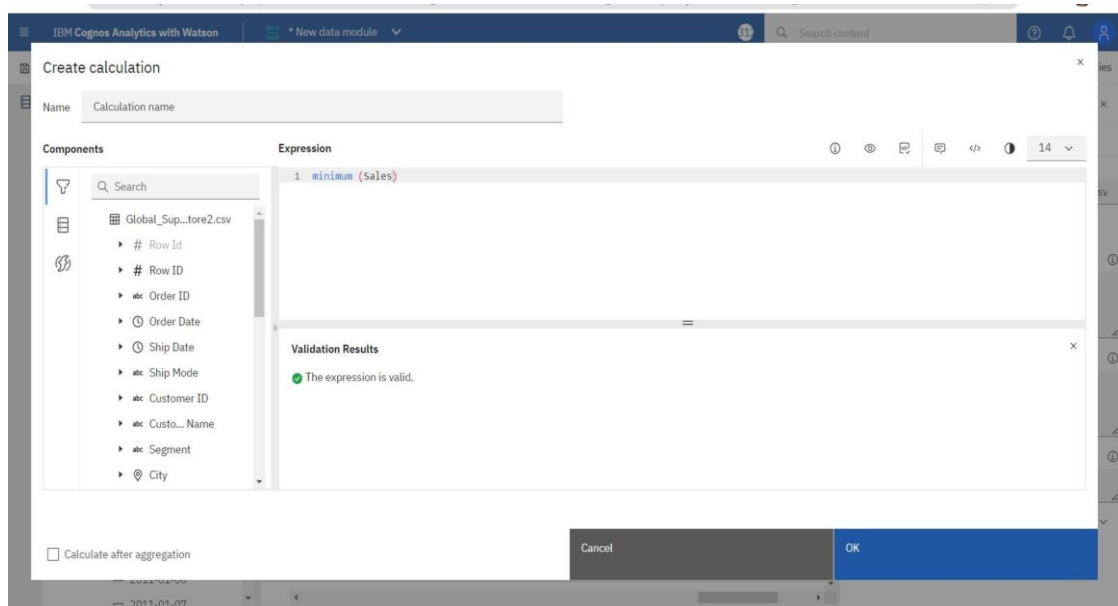
7. Similarly, calculations for Target sales, Min sales, Max Sales and Middle range sales are done

Min sales-> minimum (Sales)

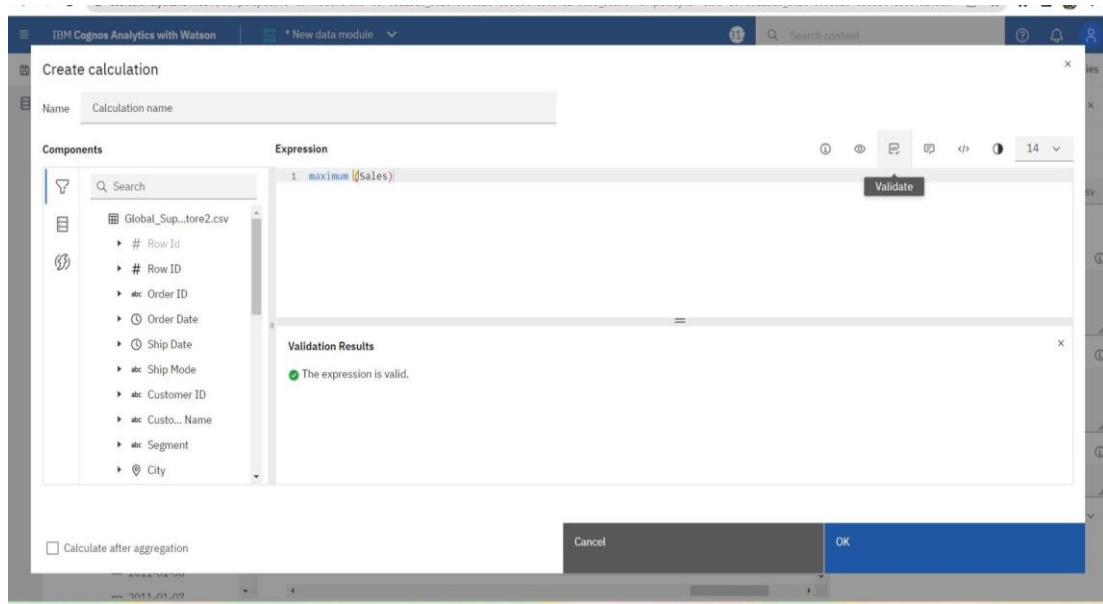
Max sales, Target sales-> maximum (Sales)Middle

range sales-> average (Sales)

Minimum(Sales)



Maximum(Sales)



Middle Range (Sales)

