

LPROJECT DEVELOPMENT PHASE

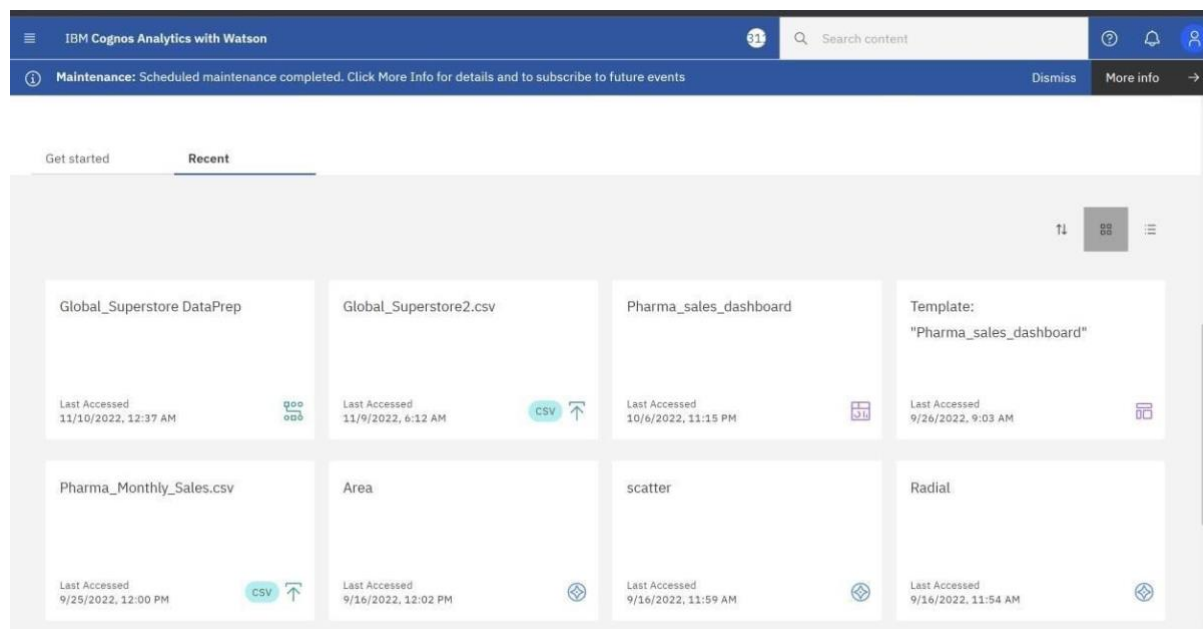
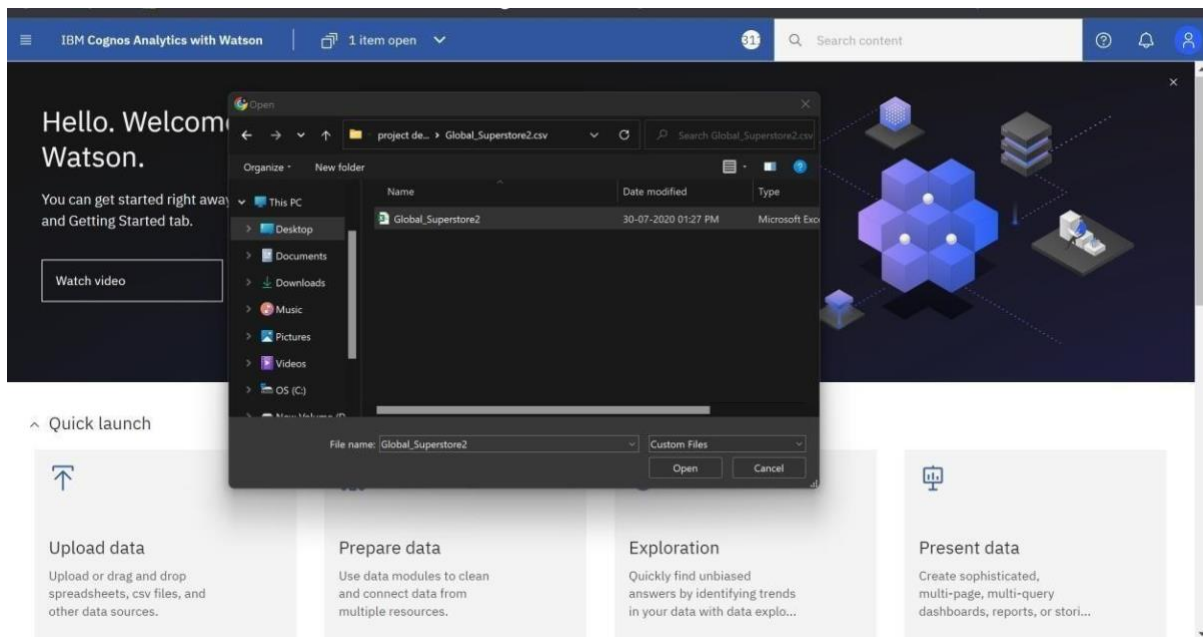
SPRINT -2

Date	27 October 2022
Team ID	PNT2022TMID41454
Project Name	Global Sales Data Analytics

Dataset:

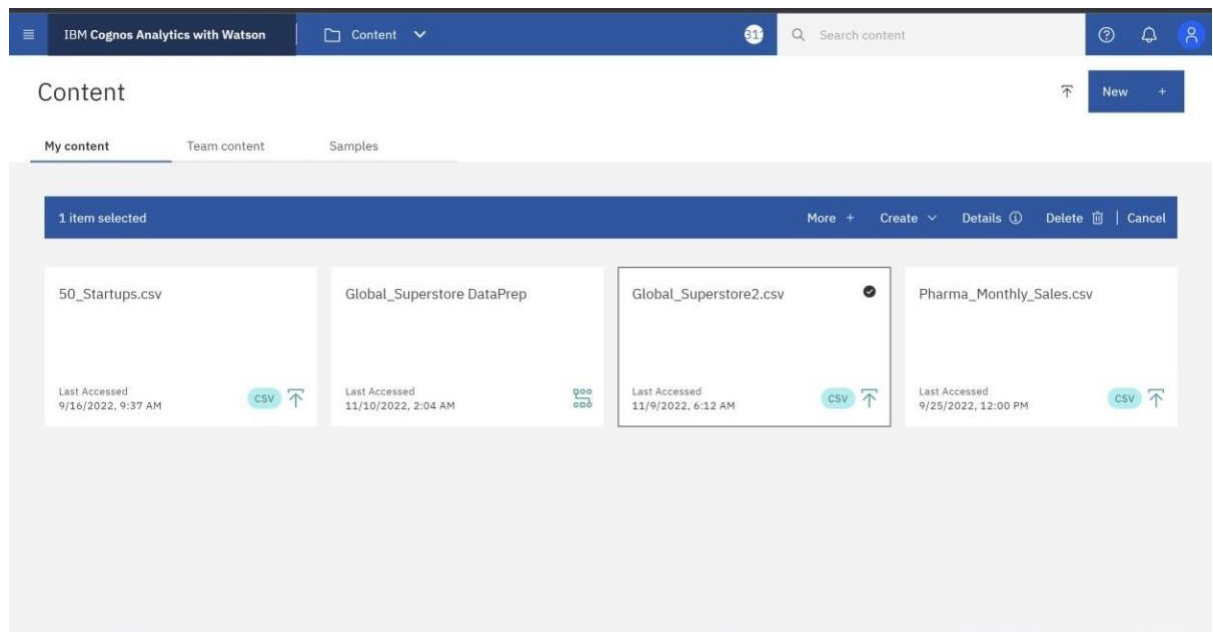
Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer	Customer Segment	City	State	Country	Postal Code	Market	Region	Product ID	Category	Sub-Category	Product Name	Sales	Quantity	Discount	Profit	Shipping Cost
1	32298	CA-2012-1	2012-01-01	Same Day	RH-19495	Rick Hanse Consumer	New York	New York	United States	10024	US	East	TEC-AC-1C	Technology	Accessories	Plantronic	2309.65	7	0	762.1845	933.57
2	26341	IN-2013-7	2013-07-01	Second Class	JR-16210	Justin Ritts Corporate	Wollongong	New South Wales	Australia		APAC	Oceania	FUR-CH-1C	Furniture	Chairs	Novimex E	3709.395	9	0.1	-288.765	923.63
3	25334	IN-2013-7	2013-07-01	First Class	CR-12730	Craig Reite Consumer	Brisbane	Queensland	Australia		APAC	Oceania	TEC-PH-1C	Technology	Phones	Nokia Sma	5175.171	9	0.1	919.971	915.49
4	13524	ES-2013-1	2013-01-01	First Class	KM-16375	Katherine Home Office	Berlin	Germany			EU	Central	TEC-PH-1C	Technology	Phones	Motorola	2892.51	5	0.1	-96.54	910.16
5	47221	SG-2013-4	2013-04-01	Same Day	RH-9495	Rick Hanse Consumer	Dakar	Dakar	Senegal		Africa	Africa	TEC-SHA-1C	Technology	Copiers	Sharp Wire	2832.96	8	0	311.52	903.04
6	22732	IN-2013-4	2013-04-01	Second Class	JM-15655	Jim Mitch Corporate	Sydney	New South Wales	Australia		APAC	Oceania	TEC-PH-1C	Technology	Phones	Samsung S	2862.675	5	0.1	763.275	897.35
7	30570	IN-2011-8	2011-08-01	First Class	TS-21340	Toby Swin Consumer	Porirua	Wellington	New Zealand		APAC	Oceania	FUR-CH-1C	Furniture	Chairs	Novimex E	1822.08	4	0	564.84	894.77
8	31192	IN-2012-8	2012-08-01	Standard	MB-18085	Mick Brown Consumer	Hamilton	Waikato	New Zealand		APAC	Oceania	FUR-TA-1C	Furniture	Tables	Chromcraft	5244.84	6	0	996.48	878.38
9	40155	CA-2014-1	2014-01-01	Standard	JW-15220	Jane Wacc Corporate	Sacramento	California	United States	95823	US	West	OFF-BI-10C	Office Sup	Binders	Fellowes P	5083.96	5	0.2	1906.485	867.69
10	40936	CA-2012-1	2012-01-01	Second Class	JM-15985	Joseph Ho Consumer	Concord	North Carolina	United States	28027	US	South	FUR-TA-1C	Furniture	Tables	Chromcraft	4297.644	13	0.4	-1862.31	865.74
11	34577	CA-2011-1	2011-01-01	Second Class	GM-14695	Greg Maxi Corporate	Alexandria	Virginia	United States	22304	US	South	OFF-SU-1C	Office Sup	Supplies	Martin Val	4164.05	5	0	83.281	846.54
12	28879	ID-2012-21	2012-01-01	First Class	AI-10780	Anthony Ji Corporate	Kabul	Kabul	Afghanistan		APAC	Central Asia	FUR-TA-1C	Furniture	Tables	Bevis Conf	4626.15	5	0	647.55	835.57
13	45794	SA-2011-1	2011-01-01	Second Class	MM-7260	Magdalen Consumer	Jizan	Jizan	Saudi Arabia		EMEA	EMEA	TEC-CIS-1C	Technology	Phones	Cisco Sma	2616.96	4	0	1151.4	832.41
14	4132	MX-2012-2	2012-02-01	Same Day	VF-21715	Vicky Frey Home Office	Toledo	Parana	Brazil		LATAM	South	FUR-CH-1C	Furniture	Chairs	Harbour C	2221.8	7	0	622.02	810.25
15	27704	IN-2013-7	2013-07-01	Second Class	PF-19120	Peter Fulle Consumer	Mudanjiang	Heilongjiang	China		APAC	North Asia	OFF-AP-10C	Office Sup	Appliances	KitchenAid	3701.52	12	0	1036.08	804.54
16	13778	ES-2014-5	2014-05-01	Second Class	BP-11185	Ben Peterr Corporate	Paris	Ile-de-France	France		EU	Central	OFF-AP-10C	Office Sup	Appliances	Breville Re	1869.588	4	0.1	186.948	801.66
17	36178	CA-2014-1	2014-01-01	Second Class	TB-21175	Thomas Bk Corporate	Henderson	Kentucky	United States	42420	US	South	TEC-AC-1C	Technology	Accessories	Logitech d	2249.91	9	0	517.4793	780.7
18	12069	ES-2014-1	2014-01-01	Standard	PJ-18835	Patrick Jor Corporate	Prato	Tuscany	Italy		EU	South	OFF-AP-10C	Office Sup	Appliances	Hoover Sta	7958.58	14	0	3979.08	778.32
19	22096	IN-2014-1	2014-01-01	First Class	JS-15685	Jim Sink Corporate	Townsville	Queensland	Australia		APAC	Oceania	TEC-CO-1C	Technology	Copiers	Brother Fa	2565.594	9	0.1	28.404	766.93
20	49463	TZ-2014-8	2014-08-01	Second Class	RH-9555	Ritsa Hight Consumer	Uvinza	Kigoma	Tanzania		Africa	Africa	OFF-KIT-1C	Office Sup	Appliances	KitchenAid	3409.74	6	0	818.28	763.38
21	46630	PL-2012-7	2012-07-01	First Class	AB-600	Ann Blume Corporate	Bytom	Silesia	Poland		EMEA	EMEA	FUR-HON-	Furniture	Tables	Hon Comp	1977.72	4	0	276.84	759.47
22	31784	IN-2011-1	2011-01-01	First Class	SA-20830	Sue Ann R Consumer	Chicago	Illinois	United States		APAC	Central	TEC-PH-1C	Technology	Phones	Apple iPho	2735.952	6	0.2	341.994	752.51
23	21586	IN-2011-4	2011-04-01	First Class	JK-15325	Jason Kian Consumer	Suzhou	Anhui	China		APAC	North Asia	FUR-CH-1C	Furniture	Chairs	SAFCO Exc	2754	6	0	358.02	752.47
24	13528	ES-2013-2	2013-02-01	Second Class	LB-16795	Laurel Belt Home Office	Edinburgh	Scotland	United Kingdom		EU	North	OFF-AP-10C	Office Sup	Appliances	KitchenAid	5273.7	10	0	1898.4	730.91
25	1570	US-2014-1	2014-01-01	First Class	NP-18325	Narenj Pat Consumer	Juárez	Chihuahua	Mexico		LATAM	North	TEC-PH-1C	Technology	Phones	Motorola	1713.84	4	0	445.52	728.97
26	3484	MX-2014-4	2014-04-01	First Class	VD-21670	Valerie Do Consumer	Soyapango	San Salvador	El Salvador		LATAM	Central	FUR-TA-1C	Furniture	Tables	Hon Comp	2106.496	8	0.2	526.496	728.39
27	30191	IN-2011-1	2011-01-01	First Class	PB-19210	Phillip Bre Corporate	Taipei	Taipei City	Taiwan		APAC	North Asia	FUR-TA-1C	Furniture	Tables	Lesro Cont	1715.16	2	0	720.36	725.57

Uploading the dataset:



Data Preparation:

- First understand and load the dataset.



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

The screenshot shows the 'Data module' in IBM Cognos Analytics. The 'Grid' tab is selected, displaying a data grid for the 'Global_Superstore2.csv' file. The grid has columns for Row ID, Row ID, Order ID, Order Date, Ship Date, Ship Mode, and Customer ID. The data is organized into rows, with the first row being the header and the subsequent rows containing data. The 'Global_Superstore2.csv' file is highlighted in the left sidebar.

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	80926	CA-2012-116678	2012-01-28	2012-01-31	Standard Class	JH-15085

- 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.

IBM Cognos Analytics with Watson

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

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

Row ID

Row ID

Filter...

Create data group...

Create navigation path...

Split...

Hide from users

Remove

Format data...

Clean...

Sort descending

Sort ascending

Properties

Row ID	Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID
1	32298	CA-2012-86369	2012-04-14	2012-04-18	Standard Class	MB-18085
2	26341	IN-2012-116638	2012-01-28	2012-01-31	Second Class	JH-15985
3	25330	IN-2012-116638	2012-01-28	2012-01-31	Second Class	JH-15985
4	13524	ES-2013-1130	2013-02-07	2013-02-07	Second Class	JR-16210
5	47221	SG-2013-1530	2013-10-18	2013-10-18	First Class	CR-12730
6	22732	IN-2013-1530	2013-01-30	2013-01-30	First Class	KM-16375
7	30570	IN-2013-1530	2013-11-06	2013-11-06	Same Day	RH-9495
8	31192	IN-2014-4120	2014-10-14	2014-10-21	Standard Class	JW-15220
9	40155	CA-2014-2840	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

IBM Cognos Analytics with Watson

New data module

Search content

Properties

Data module

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

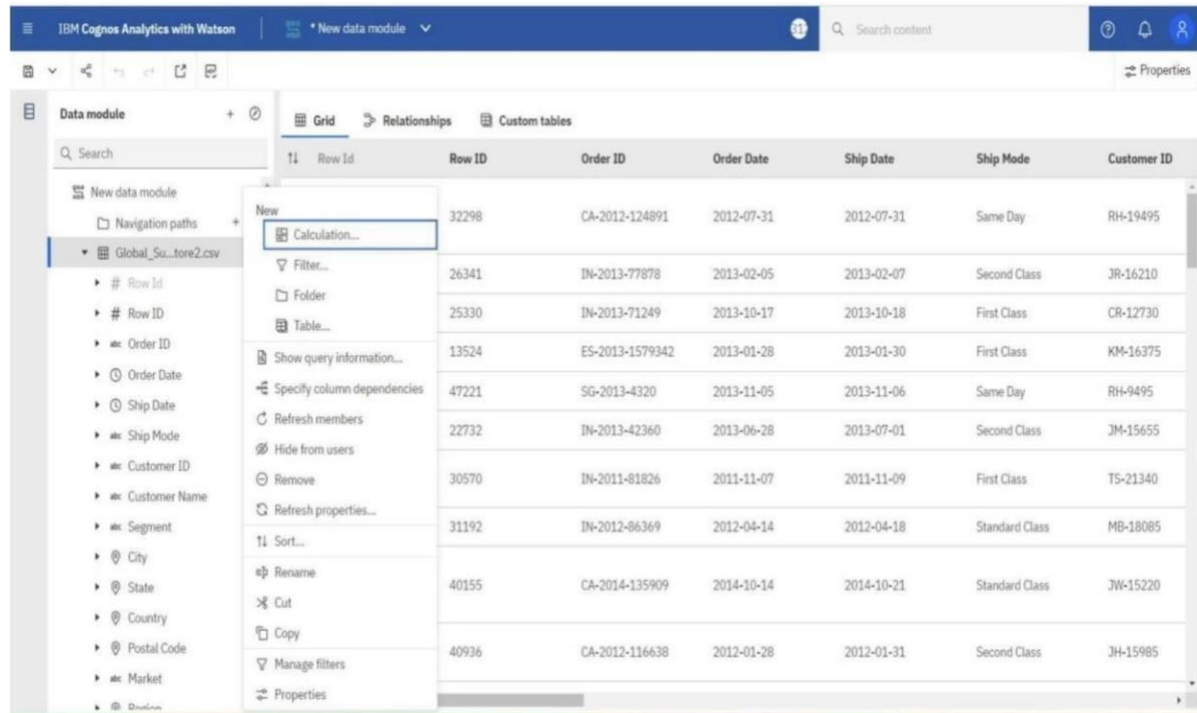
OK

Ship Mode	Customer ID
Same Day	RH-19495
Second Class	JR-16210
First Class	CR-12730
First Class	KM-16375
Same Day	RH-9495
Second Class	JM-15655
First Class	TS-21340
Standard Class	MB-18085
Standard Class	JW-15220
Second Class	JH-15985

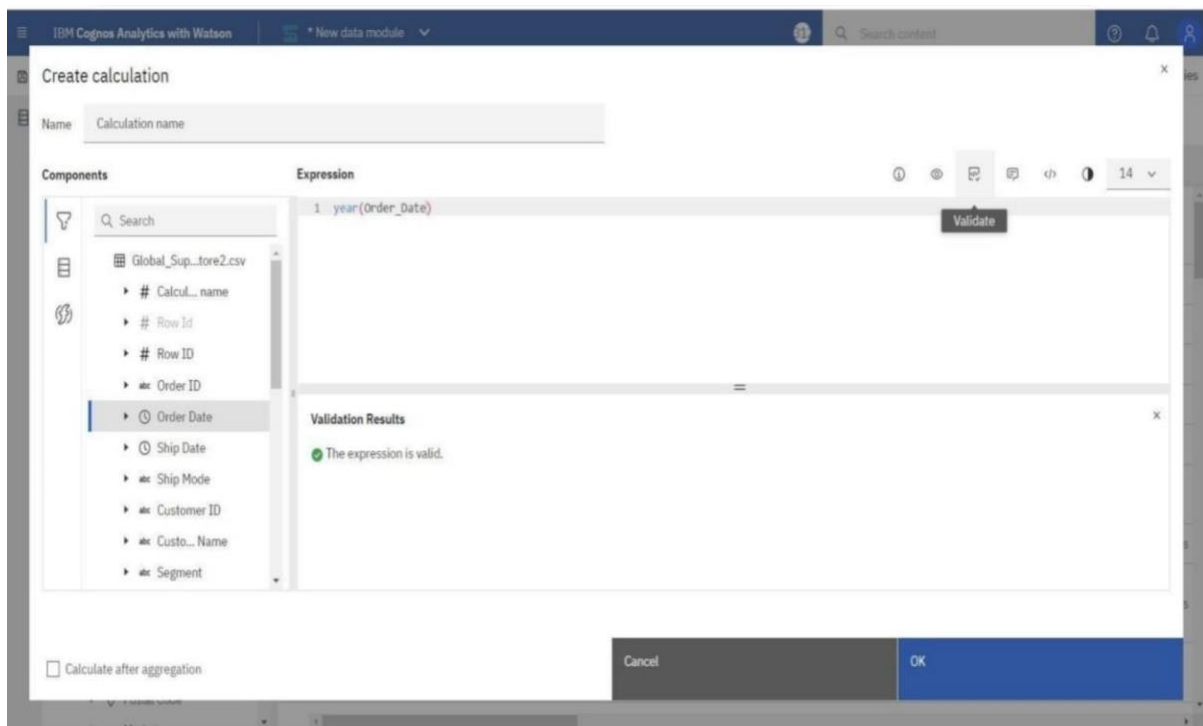
- Once cleaned save the data.

Data calculations and navigation paths:

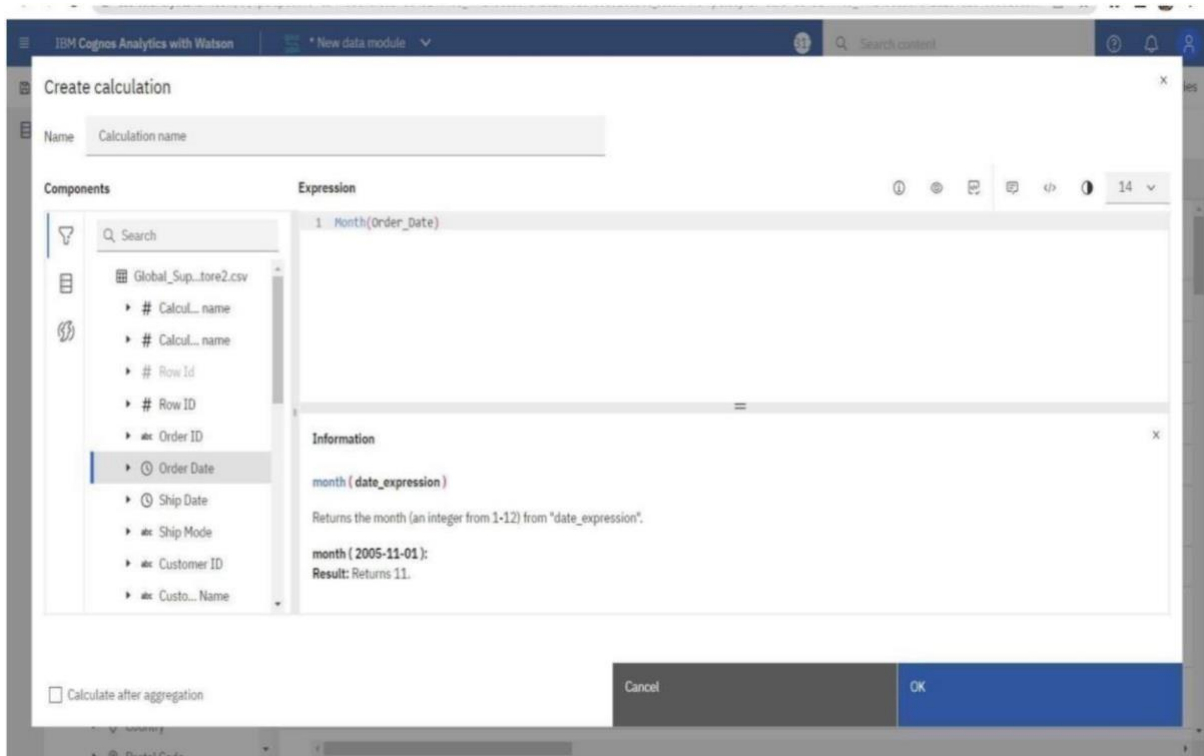
- Once you load the data, we need to prepare the data.
- Prepare calculations of year, month, day fields and also related navigation paths.
- Create a few more calculations – Target sales, Min sales, Max sales, Middle Range sales.



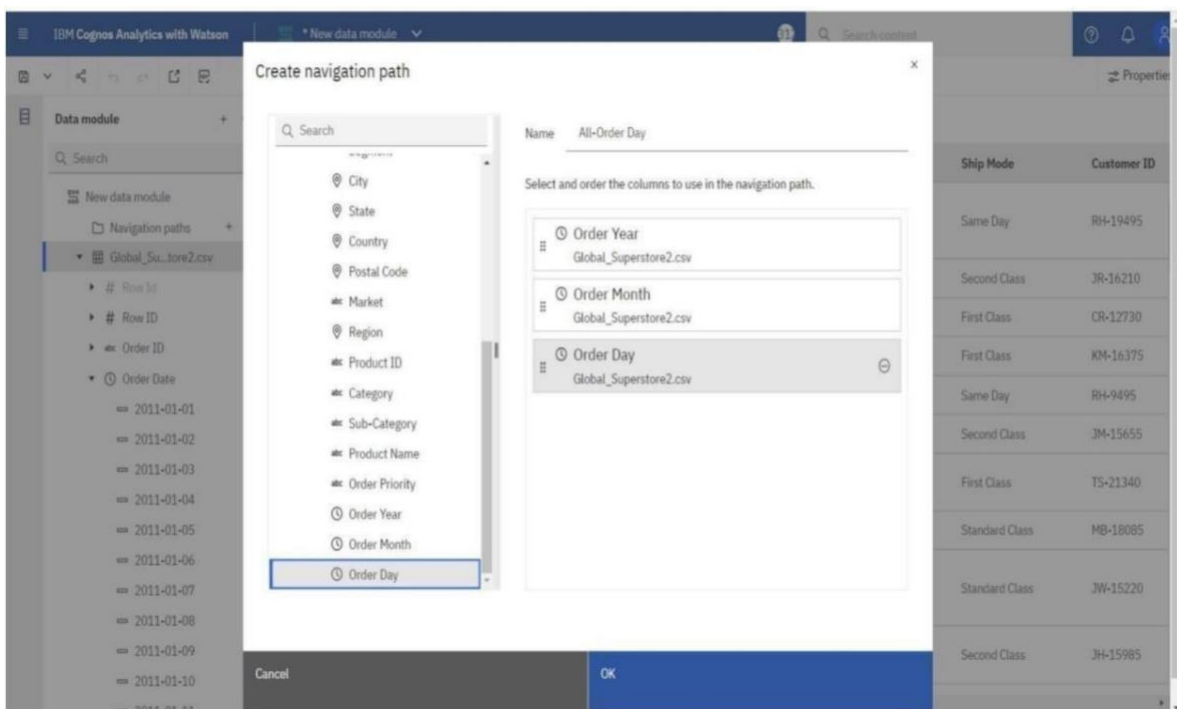
- Right click -> calculation -> type expression -> validate -> set new name as Order Year.



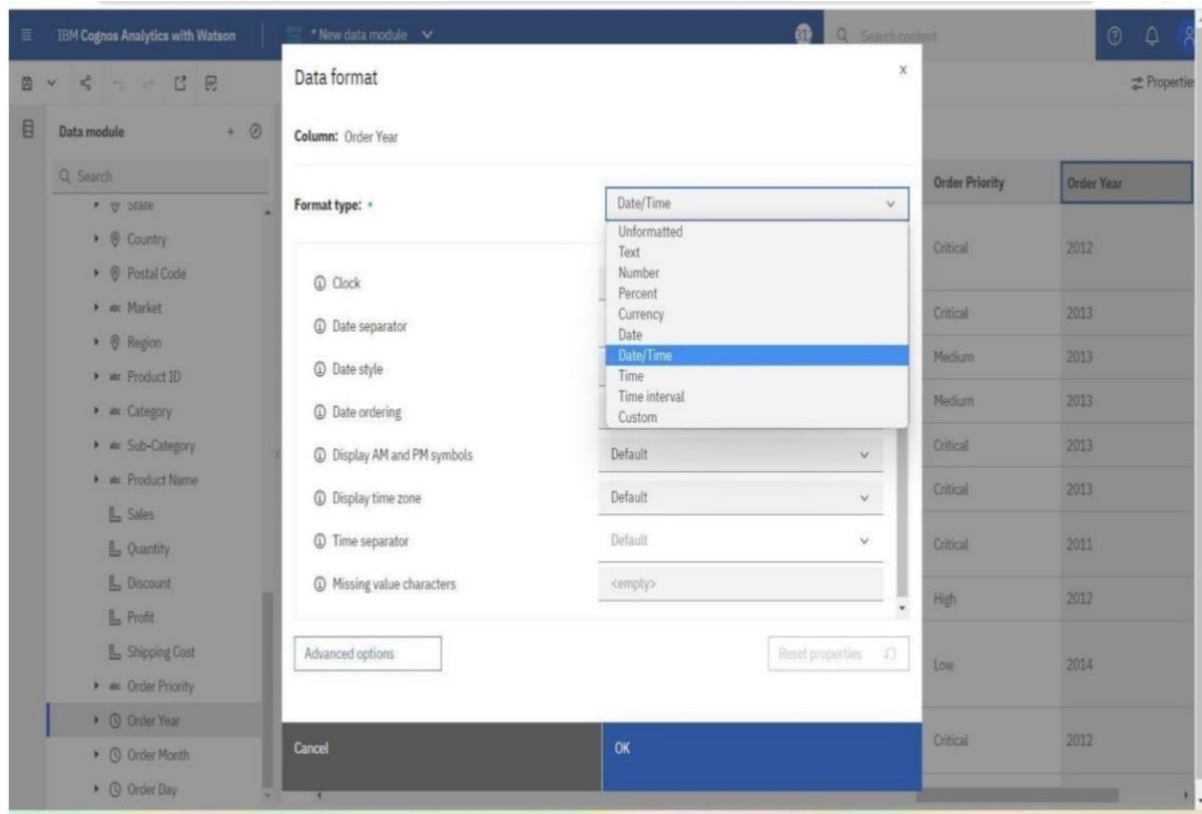
- Similarly, 'Order Month', 'Order Day' and 'All'.



- Right click on create navigation path.



- Data format -> date/Time



- 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

The screenshot displays the IBM Cognos Analytics with Watson interface. The top navigation bar includes the product name, a 'New data module' dropdown, a search bar, and user icons. The main workspace is divided into three sections: a 'Data module' sidebar on the left, a central 'Grid' view, and a 'Properties' panel on the right.

The 'Data module' sidebar lists various attributes under a search bar. The 'Grid' view shows a table with columns: Profit, Shipping Cost, Order Priority, Order Year, and Ord. The 'Properties' panel is currently set to the 'General' tab, showing the 'Order Year' attribute selected. The 'Usage' dropdown is open, showing options like Date, Year, Quarter, Season, Month, Week, Day, Hour, Minute, and Second. The 'Year' option is selected.

Profit	Shipping Cost	Order Priority	Order Year	Ord
762.1845	933.57	Critical	2012	7
-288.765	923.63	Critical	2013	2
919.971	915.49	Medium	2013	1
-96.54	910.16	Medium	2013	1
311.52	903.04	Critical	2013	1
763.275	897.35	Critical	2013	6
564.84	894.77	Critical	2011	1
996.48	878.38	High	2012	4
1906.485	867.69	Low	2014	1
-1862.3124	865.74	Critical	2012	1

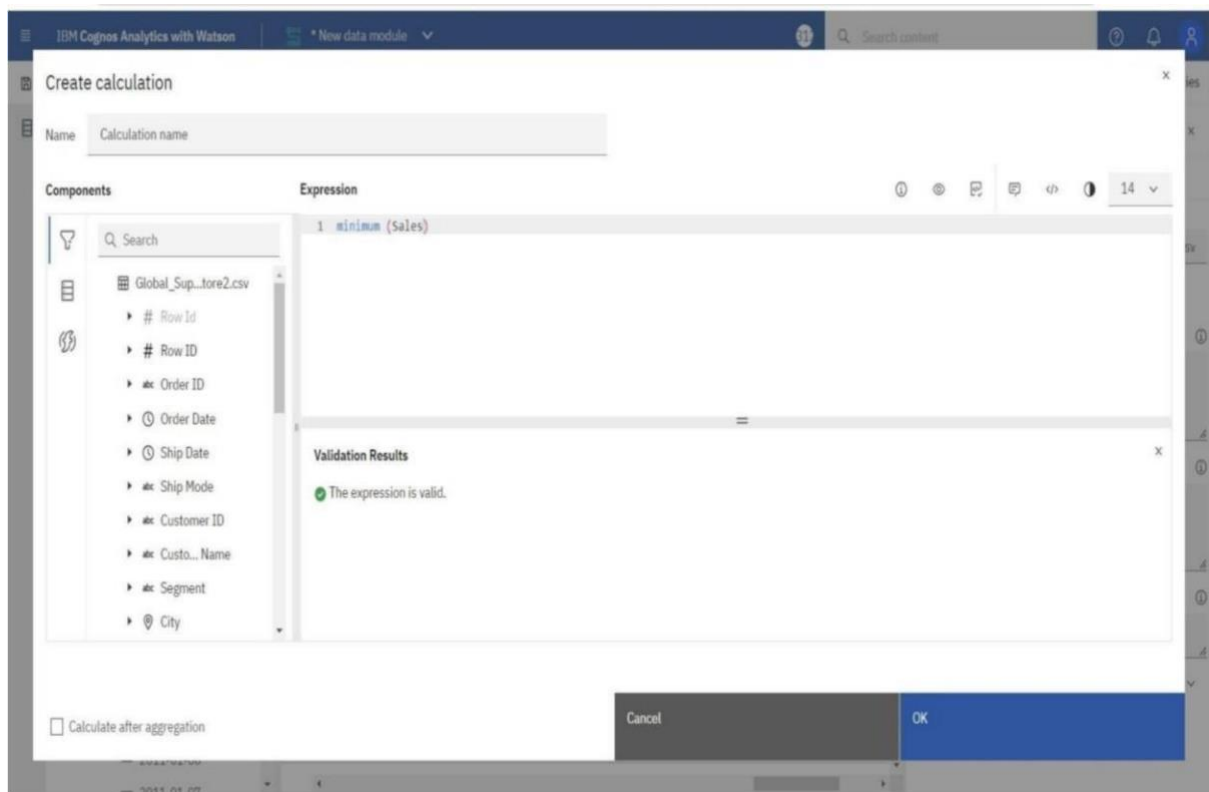
- Hence calculations for day, month and year are completed.
- Similarly calculations for Target sales, Min sales, Max sales And Middle range sales are done.

Min sales -> Minimum(sales)

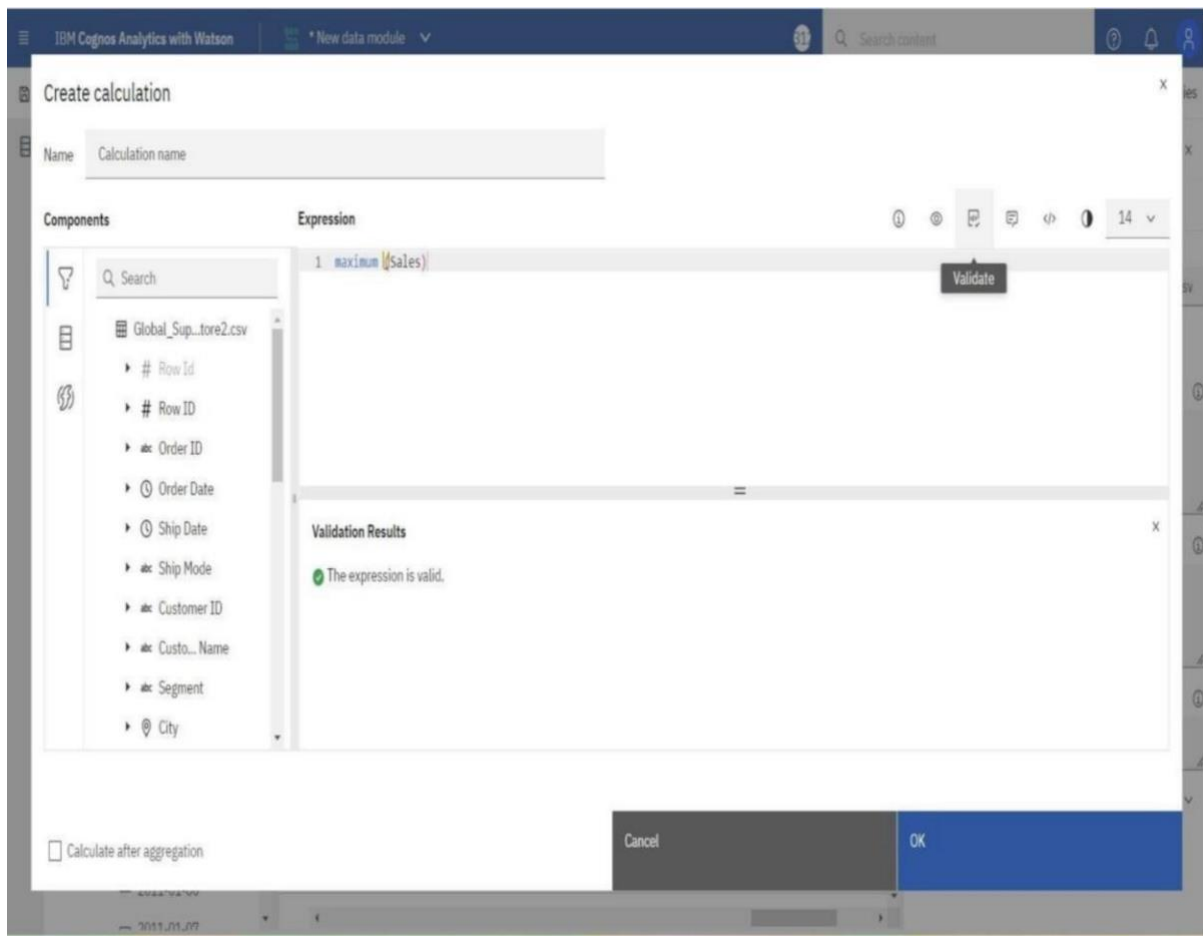
Max sales, Target sales -> Maximum(sales)

Middle range sales -> Average (sales)

Minimum(sales)



Maximum(sales)



Middle Range(sales)

