

PROJECT DEVELOPMENT PHASE

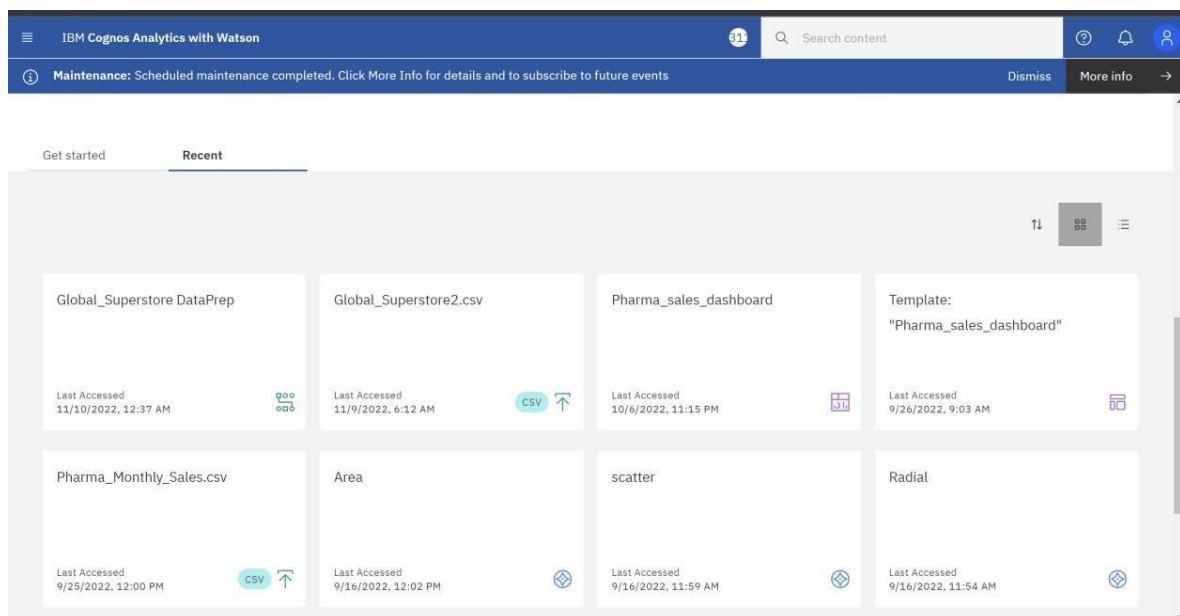
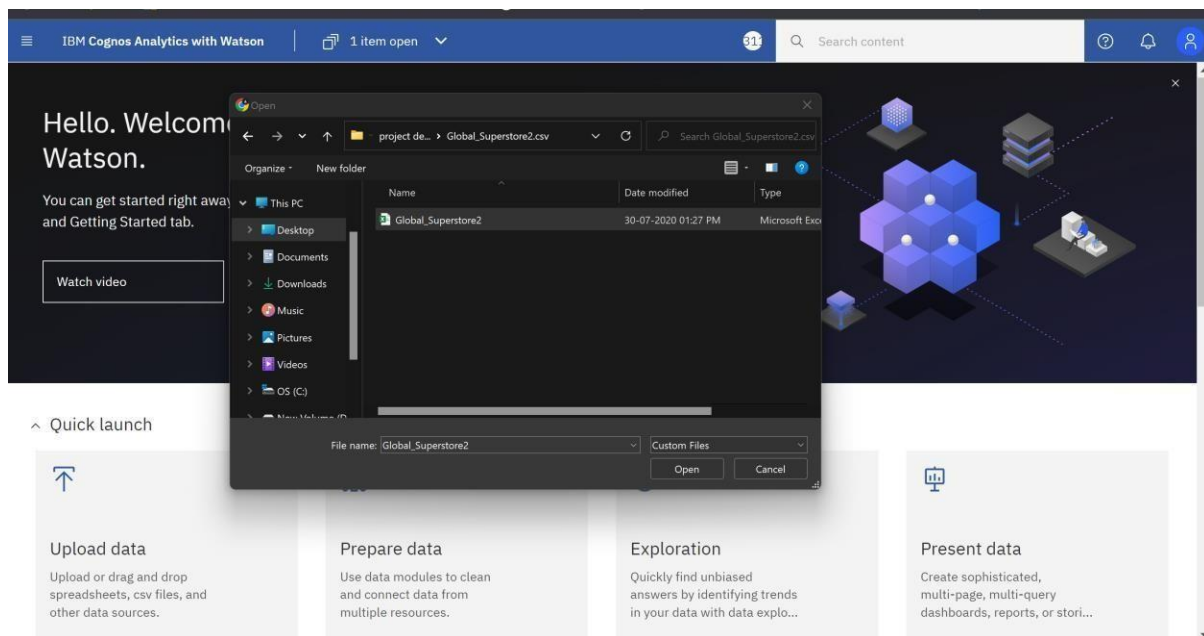
SPRINT -2

Date	05 November 2022
Team ID	PNT2022TMID28268
Project Name	Project - Global Sales Data Analytics

Dataset:

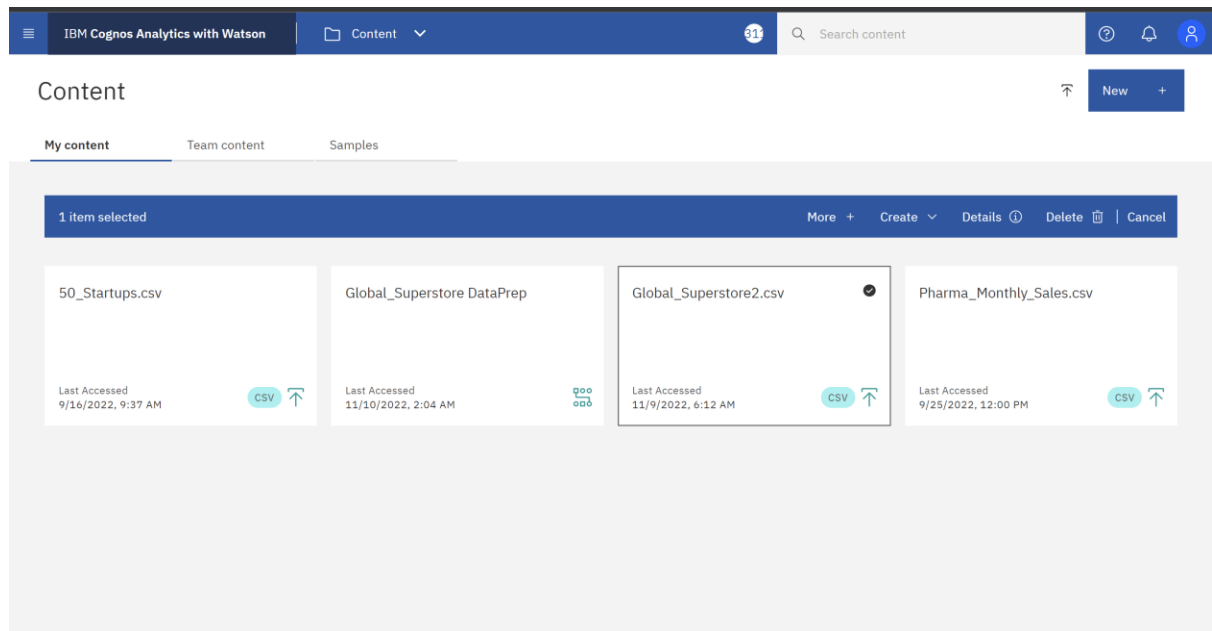
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Uploading the dataset:



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 with Watson. The top navigation bar includes 'IBM Cognos Analytics with Watson', a 'New data module' dropdown, a search bar, and user icons. A maintenance message is displayed: 'Maintenance: Scheduled maintenance completed. Click More Info for details and to subscribe to future events'. Below the navigation bar, there's a 'Data module' section with a search bar and a list of files. The 'Global_Su...tore2.csv' file is selected. The main area displays a table with the following columns: Row ID, Order ID, Order Date, Ship Date, Ship Mode, and Customer ID. The table contains 10 rows of data.

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	CA-2012-116638	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 | * New data module

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	Order ID	Order Date	Ship Date	Ship Mode	Customer ID
1	32298	CA-2012-116638	2012-01-28	2012-01-31	Same Day	RH-19495
2	26341	IN-2013-116638	2013-02-07	2013-02-07	Second Class	JR-16210
3	25330	IN-2013-10-18	2013-10-18	2013-10-18	First Class	CR-12730
4	13524	ES-2013-01-30	2013-01-30	2013-01-30	First Class	KM-16375
5	47221	SG-2013-11-06	2013-11-06	2013-11-06	Same Day	RH-9495
6	22732	IN-2013-07-01	2013-07-01	2013-07-01	Second Class	JM-15655
7	30570	IN-2011-11-09	2011-11-09	2011-11-09	First Class	TS-21340
8	31192	IN-2012-04-14	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 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

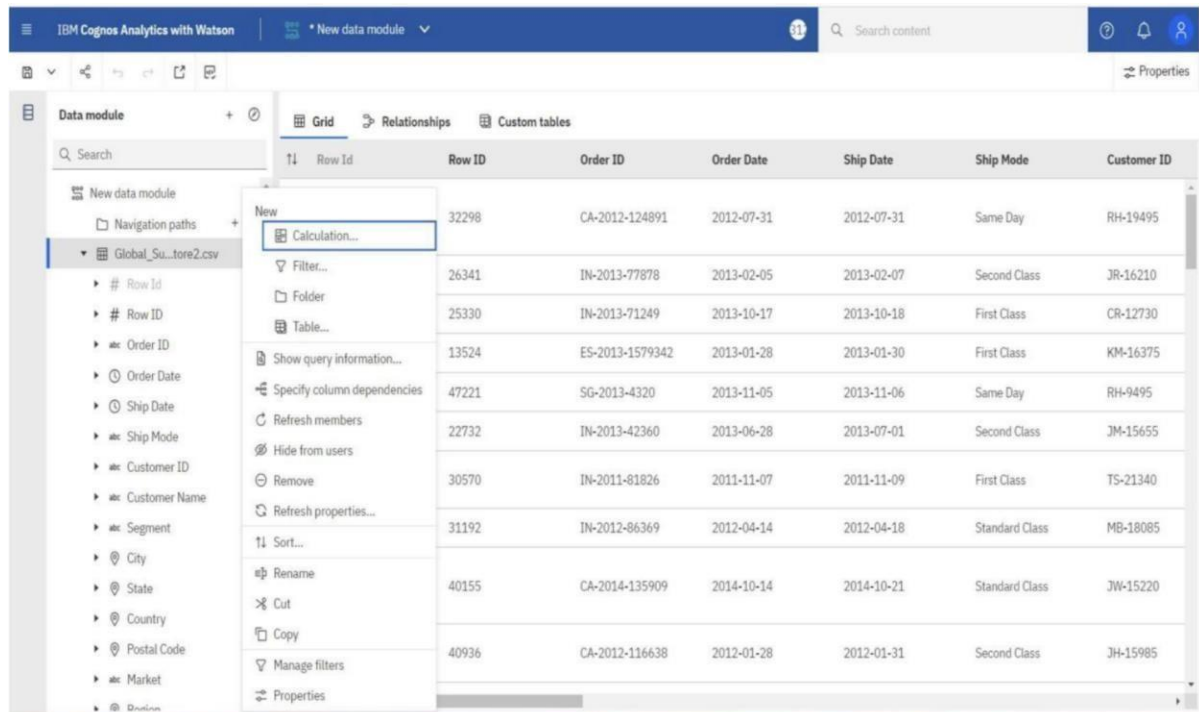
OK

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

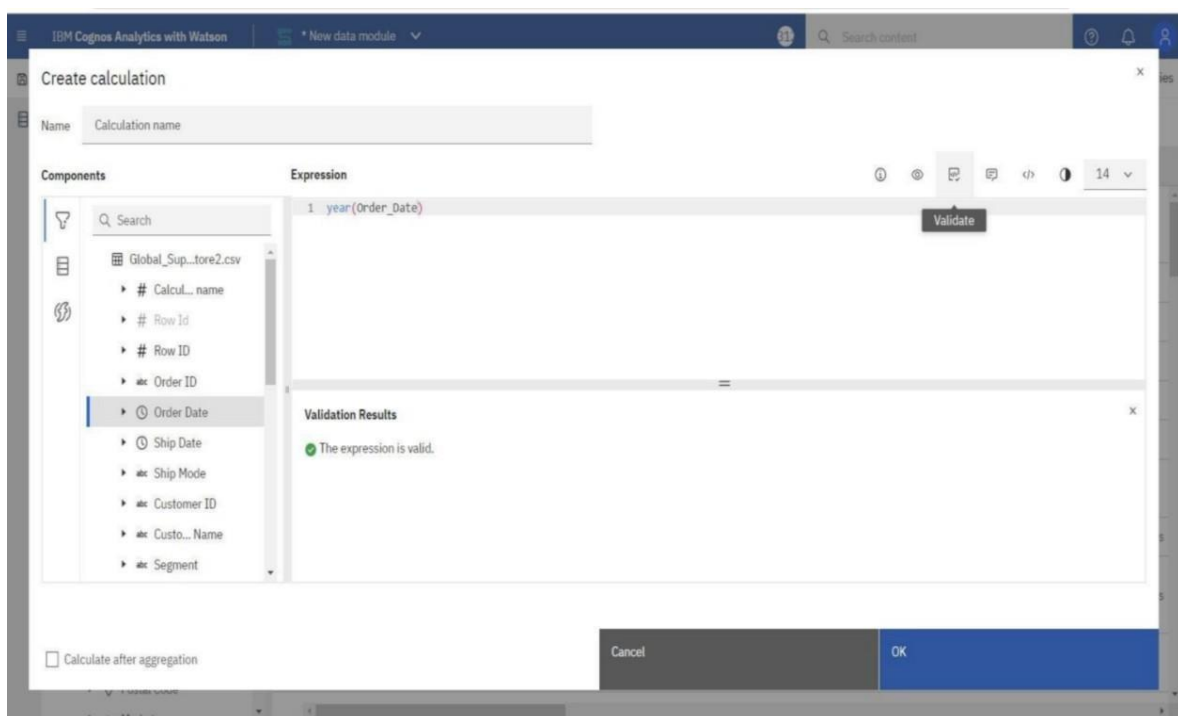
- Once cleaned save the data.

Data calculations and navigation paths:

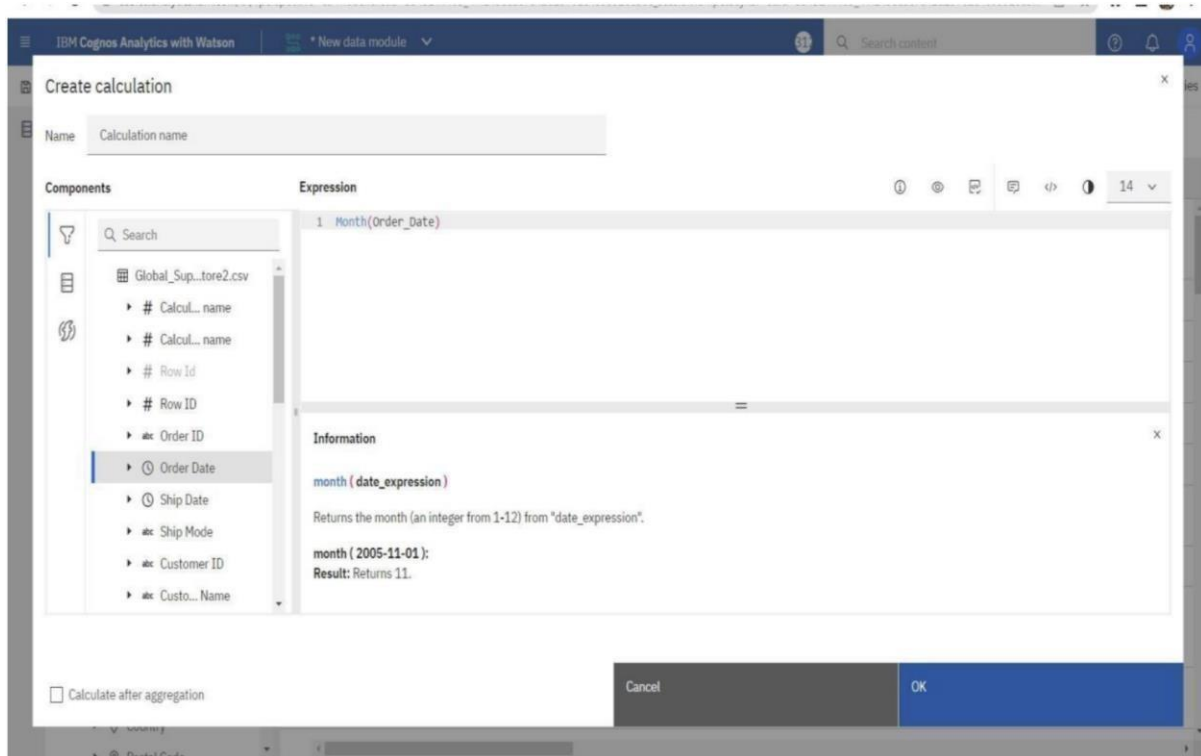
- Once you load the data, we need to prepare the data.
- Prepare calculations of year, month, day fields and also related navigation paths.
- Create a few more calculations – Target sales, Min sales, Max sales, Middle Range sales.



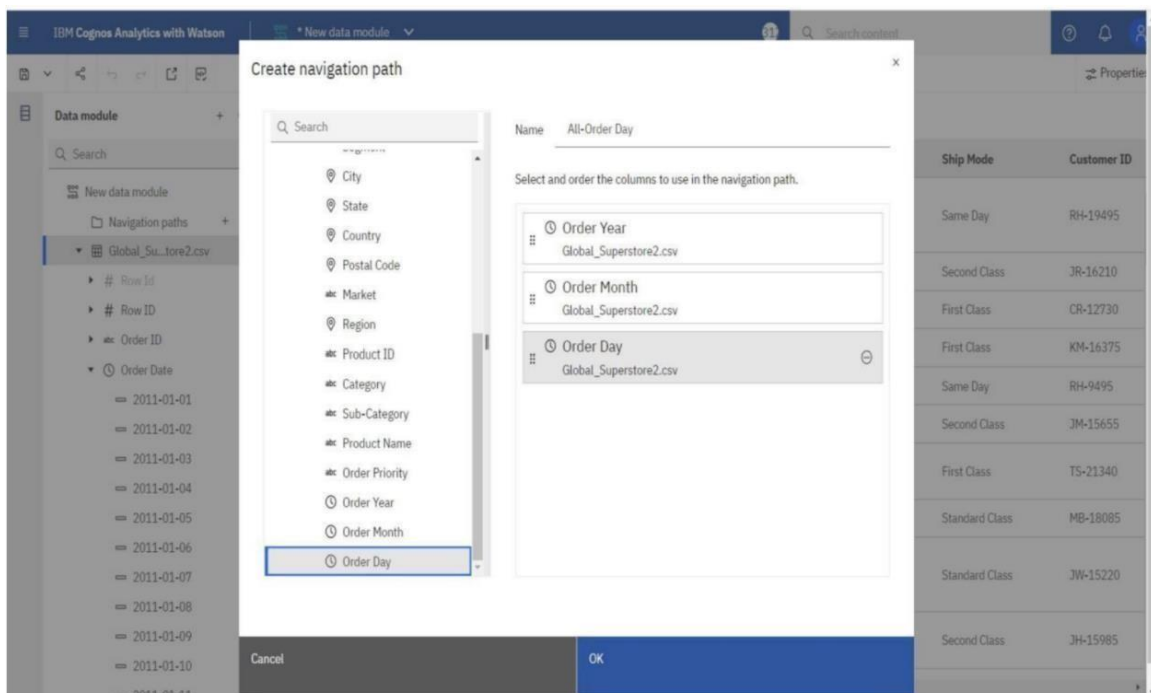
- Right click -> calculation -> type expression -> validate -> set new name as Order Year.



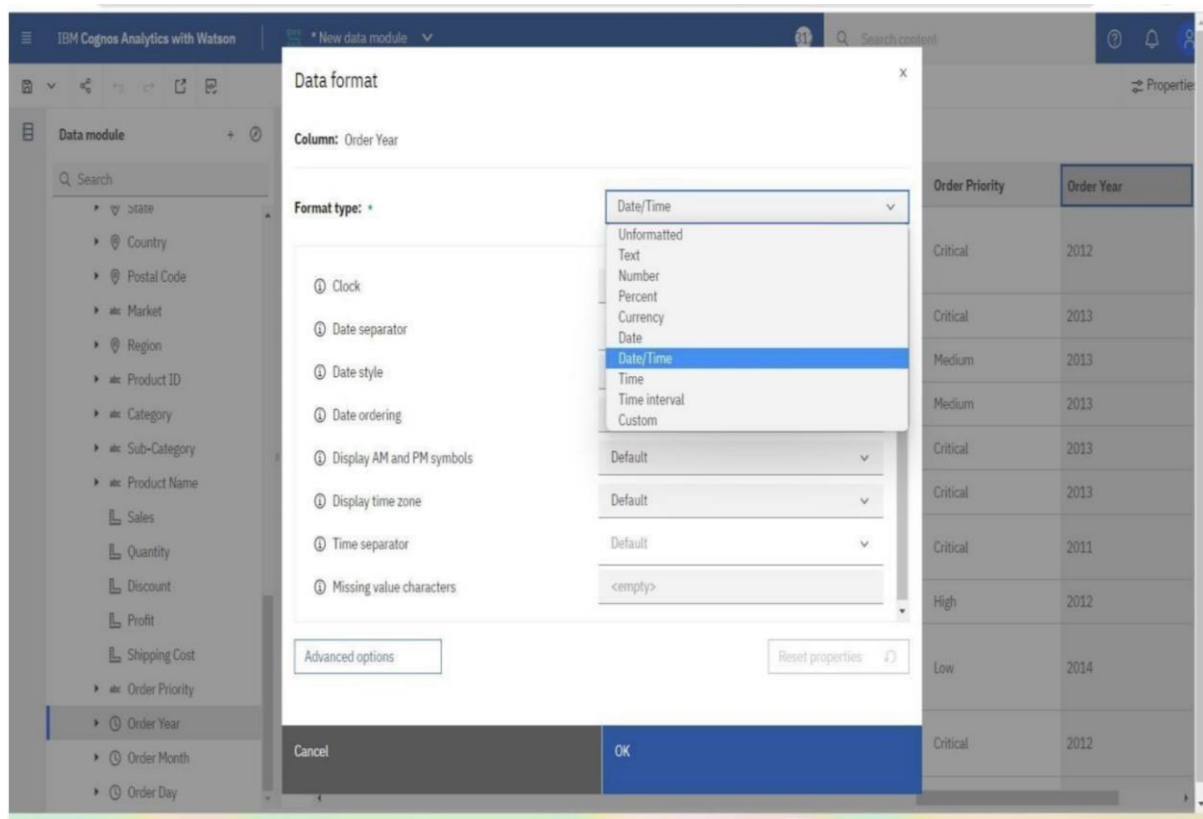
- Similarly, 'Order Month', 'Order Day' and 'All'.



- 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 logo, a search bar, and user profile icons. The main workspace is divided into three panes: a left-hand 'Data module' pane, a central 'Grid' pane, and a right-hand 'Properties' pane.

The 'Data module' pane on the left contains a search bar and a list of data fields categorized by type (e.g., State, Country, Postal Code, Market, Region, Product ID, Category, Sub-Category, Product Name, Sales, Quantity, Discount, Profit, Shipping Cost, Order Priority, Order Year, Order Month, Order Day). The 'Order Year' field is currently selected.

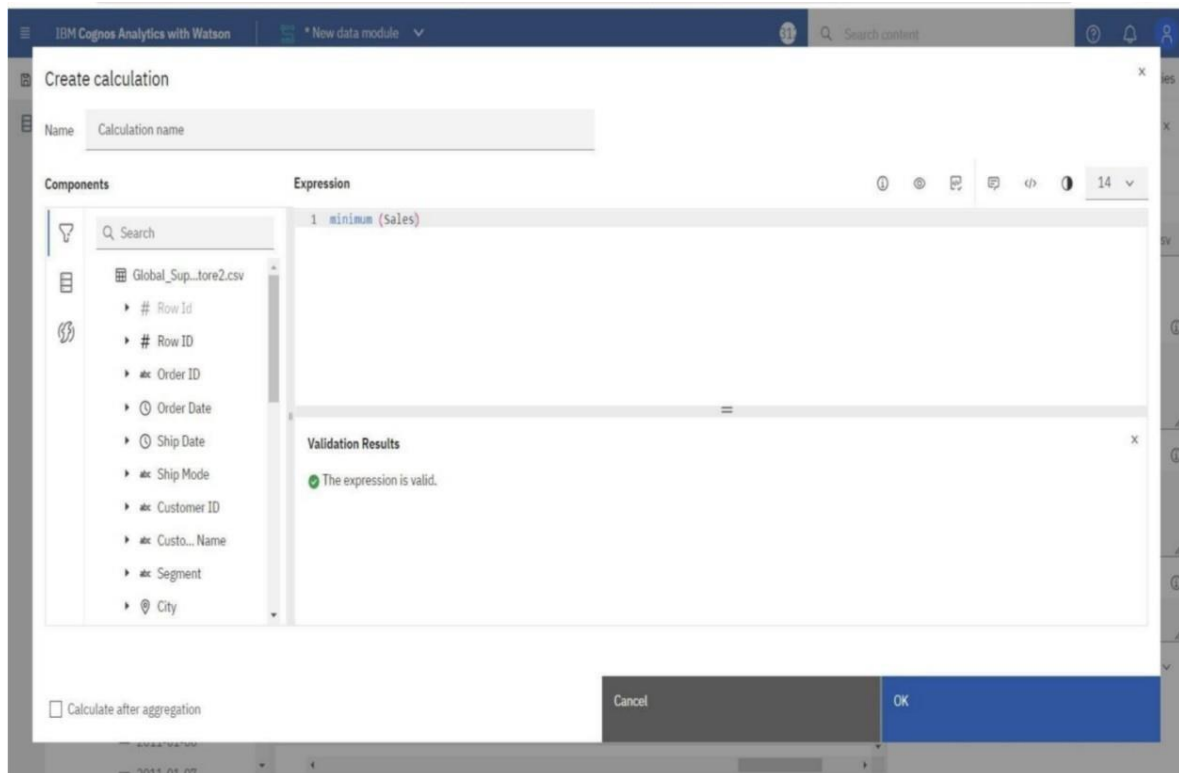
The central 'Grid' pane shows a table with the following columns: Profit, Shipping Cost, Order Priority, Order Year, and an unlabeled column. The data rows are as follows:

Profit	Shipping Cost	Order Priority	Order Year	
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

The 'Properties' pane on the right is open to the 'General' tab. It shows the 'Order Year' field's properties, including a 'Label' dropdown set to 'Order Year', a 'Hide from users' toggle, an 'Expression' field with a 'View or edit' link, and a 'Usage' dropdown set to 'Date'. A sub-menu for 'Date' is open, showing options: Year, Quarter, Season, Month, Week, Day, Hour, Minute, and Second. The 'Year' option is selected. Below this, there is a 'Description' field and a 'Comments' field.

- 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)

Minumum(sales)



Maximum(sales)

The screenshot shows the 'Create calculation' dialog in IBM Cognos Analytics. The 'Name' field is labeled 'Calculation name'. The 'Components' pane on the left lists fields from 'Global_Sup...tore2.csv', including Row Id, Order ID, Order Date, Ship Date, Ship Mode, Customer ID, Customer Name, Segment, and City. The 'Expression' field contains the formula '1 maximum(Sales)'. A 'Validate' button is positioned to the right of the expression. Below the expression field, a 'Validation Results' section displays a green checkmark and the text 'The expression is valid.' At the bottom of the dialog, there is a checkbox for 'Calculate after aggregation' and 'Cancel' and 'OK' buttons.

IBM Cognos Analytics with Watson

* New data module

Search content

Create calculation

Name: Calculation name

Components

- Global_Sup...tore2.csv
 - # Row Id
 - # Row ID
 - abc Order ID
 - Order Date
 - Ship Date
 - abc Ship Mode
 - abc Customer ID
 - Custo... Name
 - abc Segment
 - City

Expression

1 maximum(Sales)

Validate

Validation Results

The expression is valid.

☐ Calculate after aggregation

Cancel OK

Middle Range(sales)

