PREPARE THE DATASETS

Team ID	PNT2022TMID18438
Project Name	Global Sales Data Analytics
Date	6 November 2022

SPRINT 2 FUNCTIONAL REQUIREMENT

- IBM DB2 Service creation
- DB2 connectivity with cognos
- Create Data Module
- Data Preparation
- Data Exploration

DB2 Connection:

Creating new data module for prepare data:

DATA PREPARATION

1. First understand and load the data.

Neathra V S (1d197fc00f...
neathrasaravanan@gmail.com
Profile and settings

My schedules and subscriptions
Log my session

About
Manage product subscription
Privacy
Cookie Preferences

IBM Cognos Analytics Mobile

Log out

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.

Watch video	Take a product tour

Quick launch

Upload data
Upload or drag and drop

Prepare data
Use data modules to clean

Exploration
Quickly find unbiased

Present data
Create sophisticated,

Content

New +

My content   Team content   Samples

50_Startups.csv	bank.csv	Global_Superstore2.csv	New exploration
Last Accessed 9/14/2022, 5:54 AM	Last Accessed 9/15/2022, 8:49 AM	Last Accessed 11/8/2022, 5:12 AM	Last Accessed 9/14/2022, 7:24 AM

Olympic Events.xlsx	Olympic Medals.xlsx	sales.csv

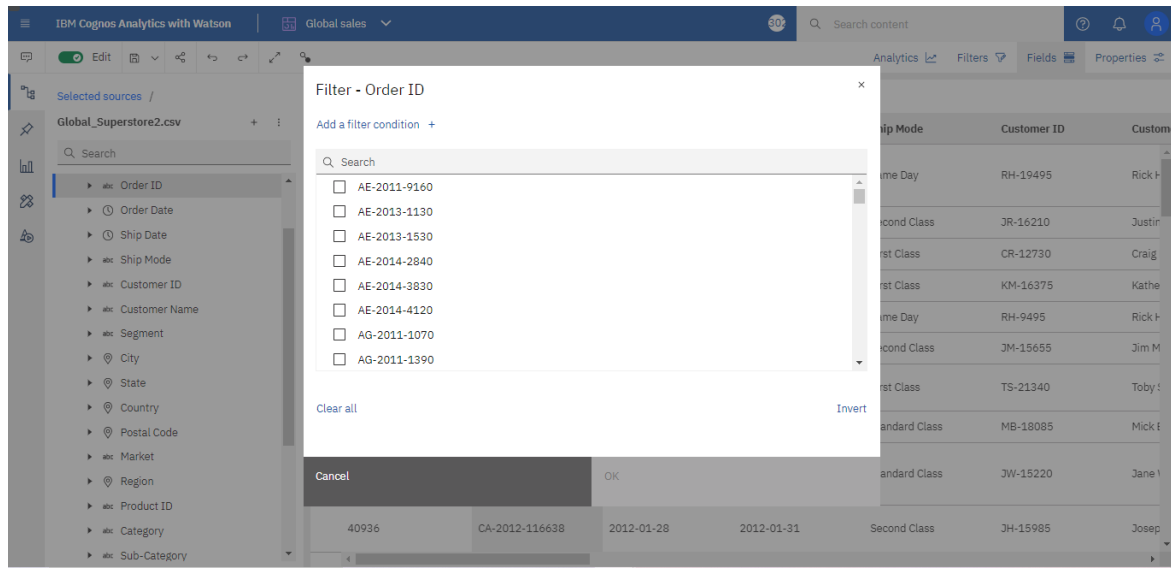2. Since there is only single file, there need not be relationships or custom tables for the data.

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.

3. Once cleaned, the data is saved.

DATE CALCULATIONS AND NAVIGATION PATHS
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.
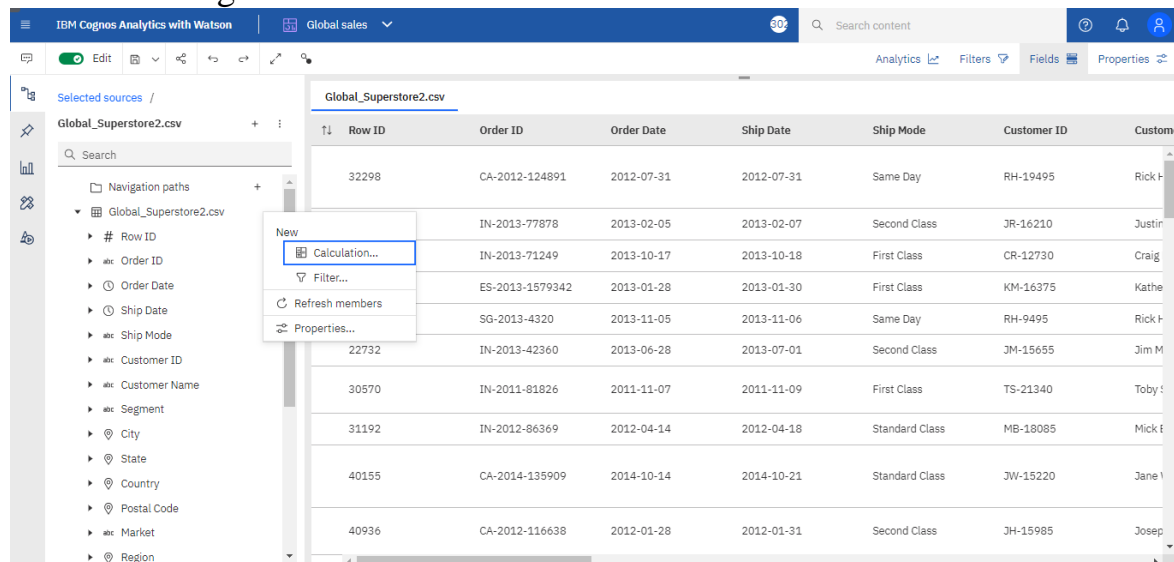
1. Right click> calculation> type expression> validate> Set   Name as 'Order Year'

2. Similarly, 'OrderMonth', 'OrderDay' and 'All'

OrderYear -> Year (Order_Date)

OrderMonth -> Month (Order_Date)

OrderDay -> Day (Order_Date)

All -> All

IBM Cognos Analytics with Watson | * Global sales

Create calculation

Name: Order_Day

Components

Global_Sup...tore2.csv
- ▸ Order_Month
- ▸ Order_Year
- ▸ # Row ID
- ▸ Order ID
- ▸ Order Date
- ▸ Ship Date
- ▸ Ship Mode
- ▸ Customer ID
- ▸ Custo... Name
- ▸ Segment

Expression

```
1  day (Order_Date )
```

Validation Results

✓ The expression is valid.

☐ Calculate after aggregation

Cancel   OK

Postal Code
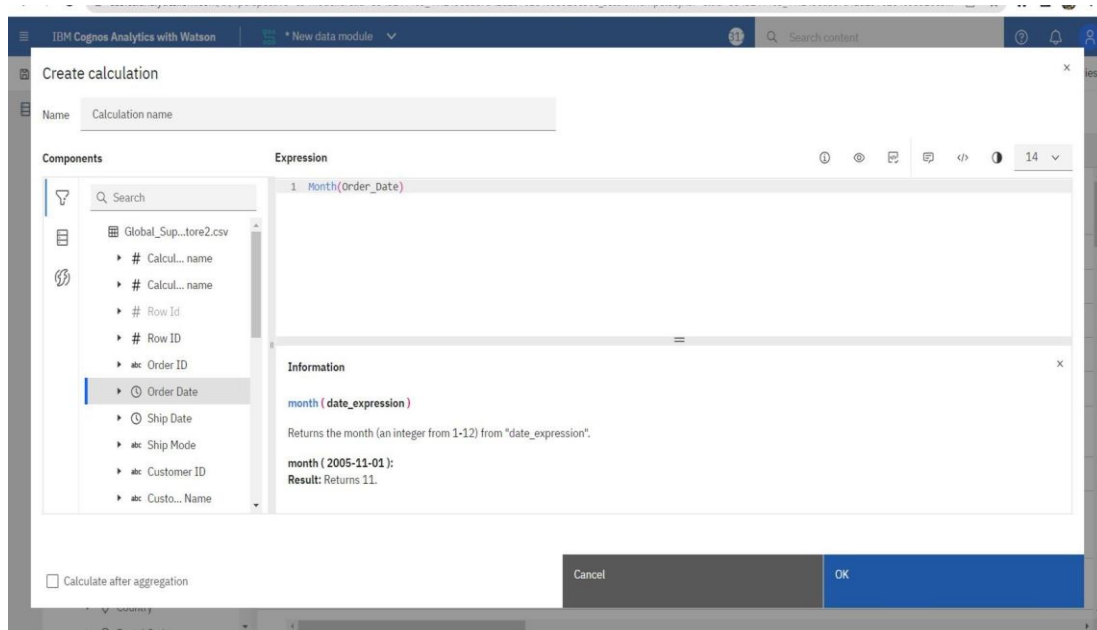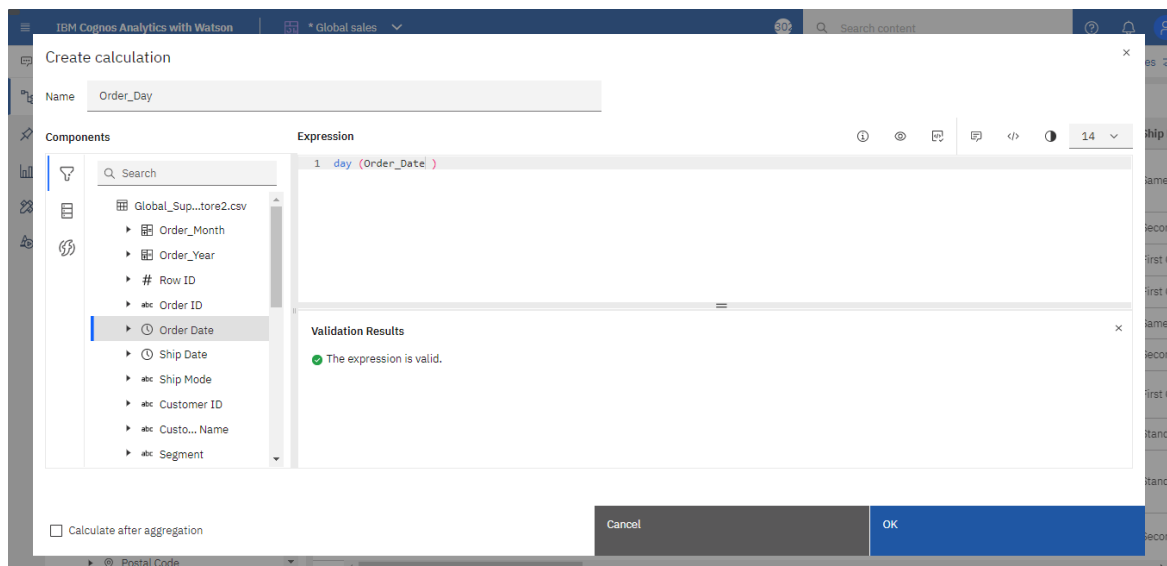
3. Right click on create navigation path
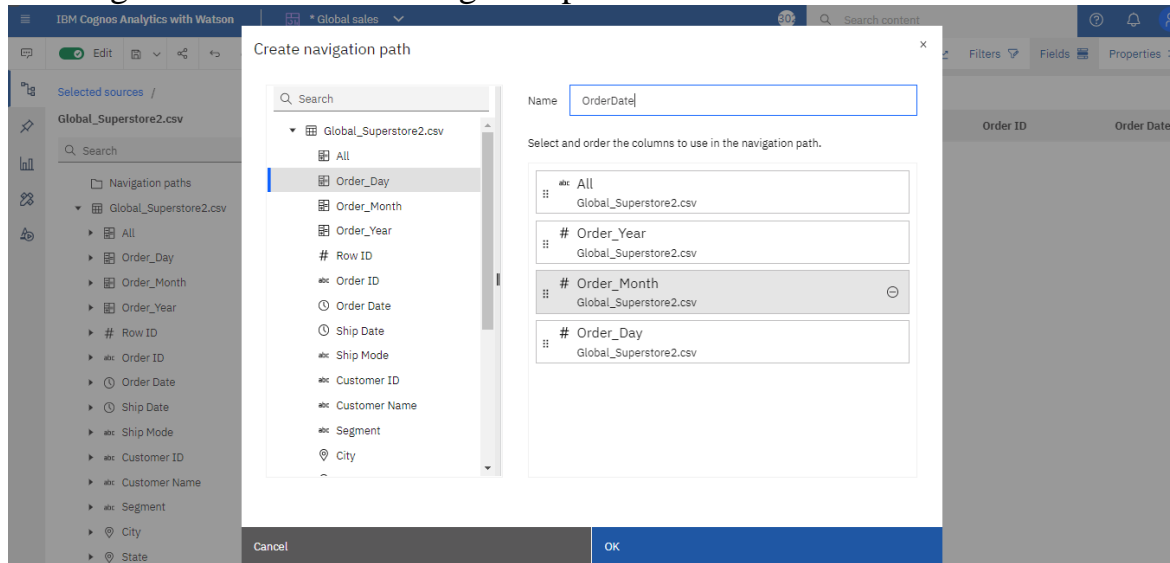
4. Data format> Date/Time
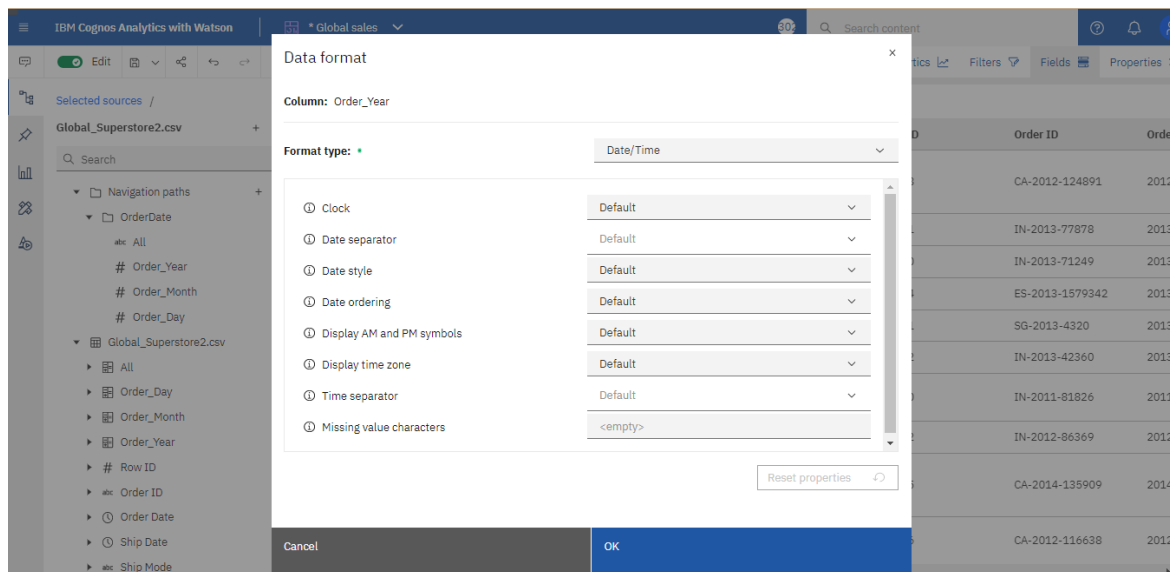
5. Properties> Usage-> Attribute
Aggregate-> Count Distinct
Data Type-> Integer
Represents-> Time, (Year, Month, Day Respectively)
Display Options-> Show Members
This way it becomes a Numerical data Type

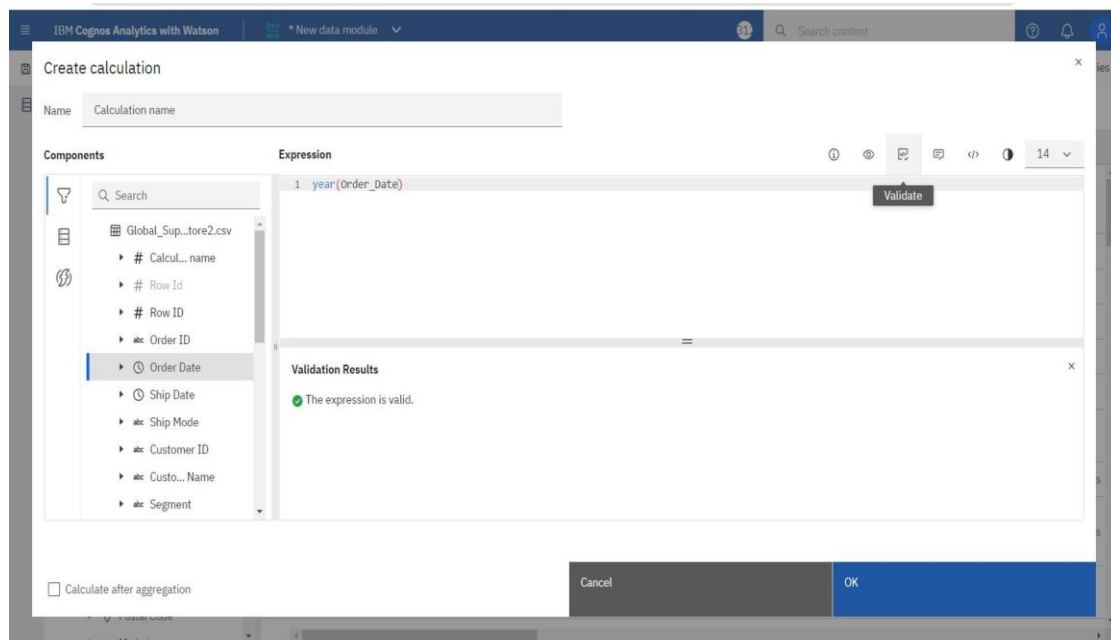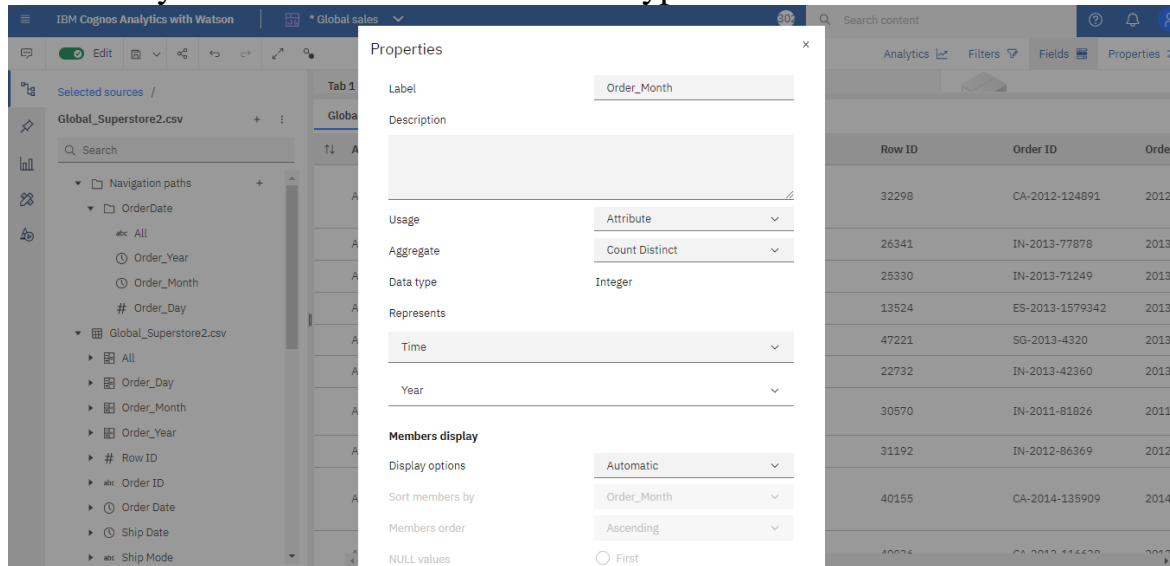6. Hence calculations for day, month and year are completed.

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)
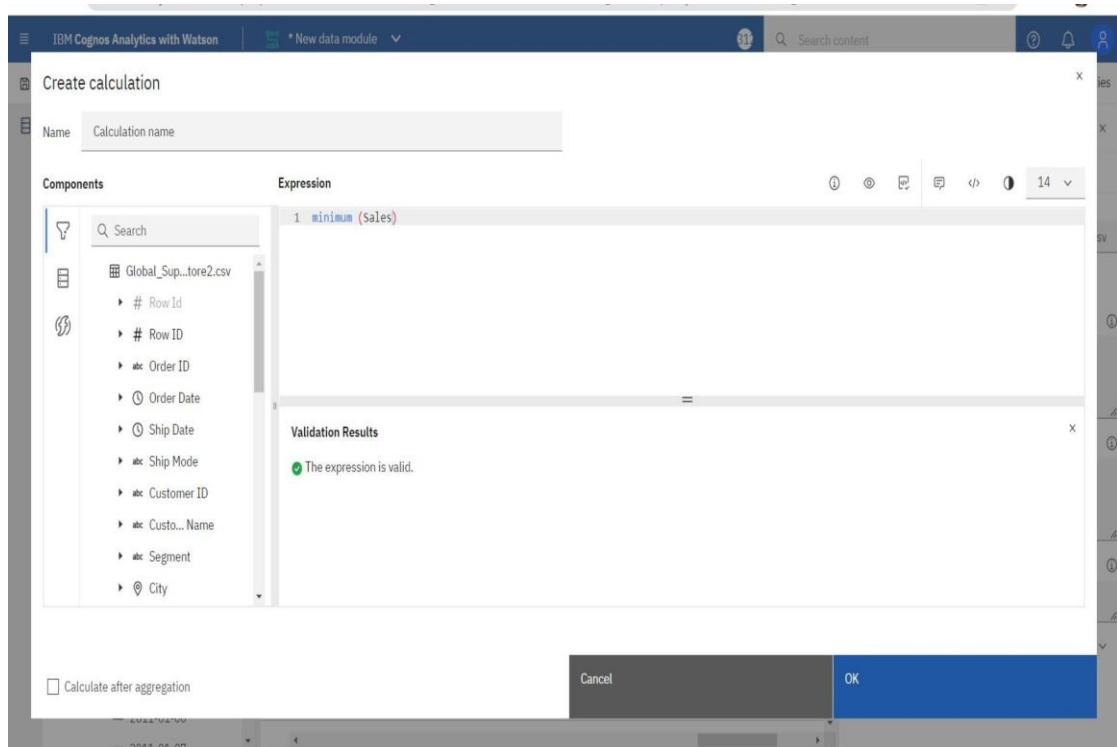
Maximum(Sales)

Middle Range (Sales)

DATA EXPLORATION:

STEP 1: CLICK THE EXPLORATION

STEP 2 : ADD A DATA SOURCE TO EXPLORE

STEP 3 : SELECT THE NEEDED METRIC TO BE EXPLORED

STEP 4 : EXPLORE THE DATA RELATIONSHIPS

Search content

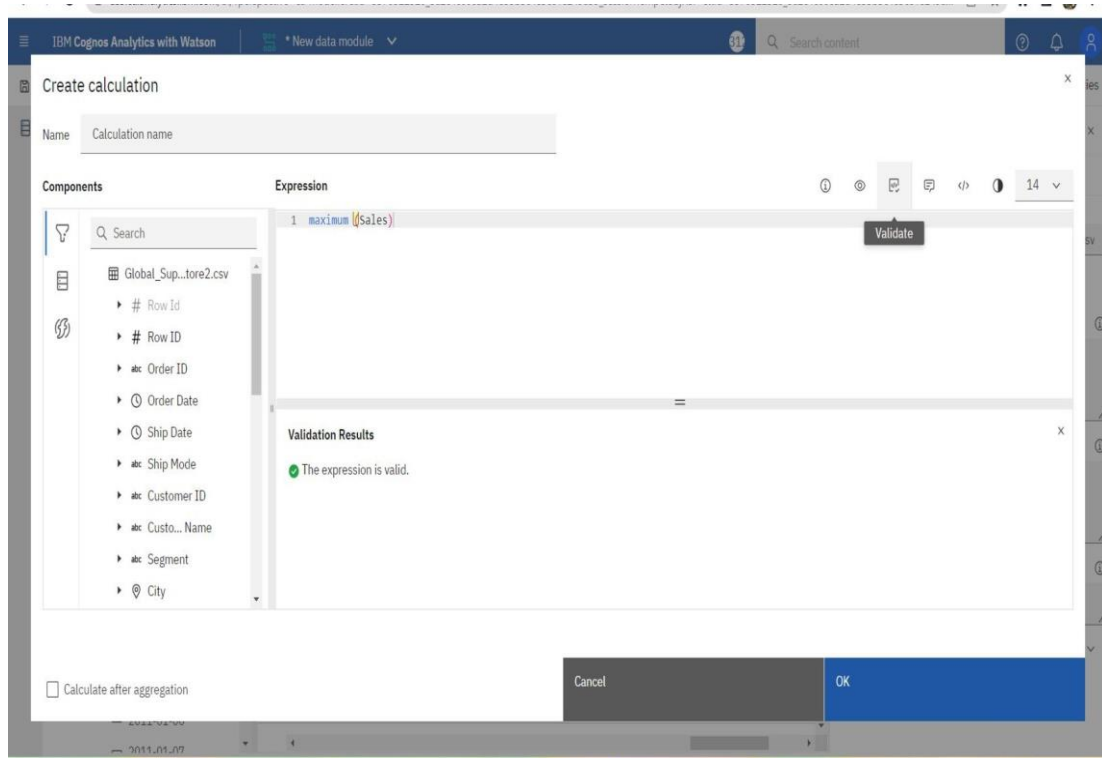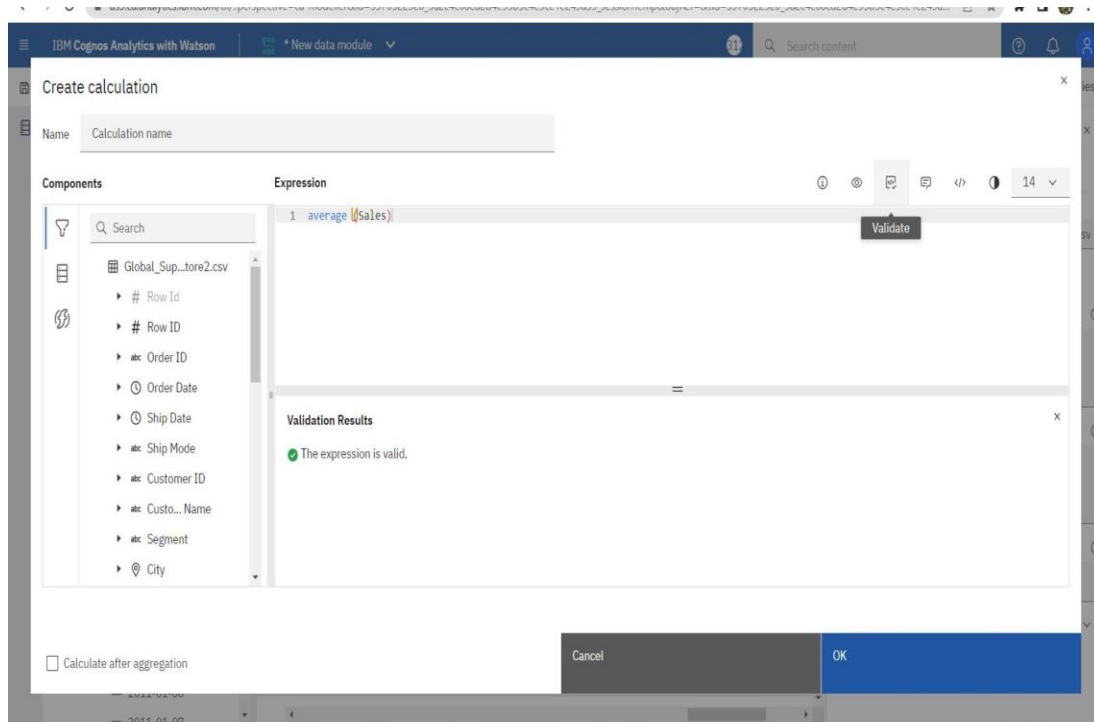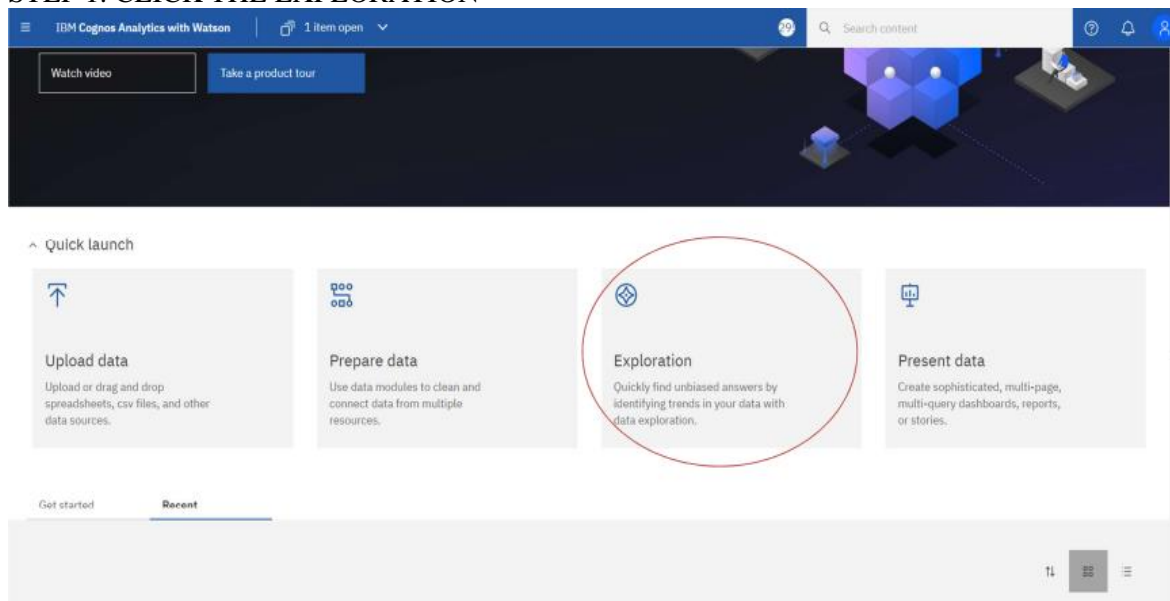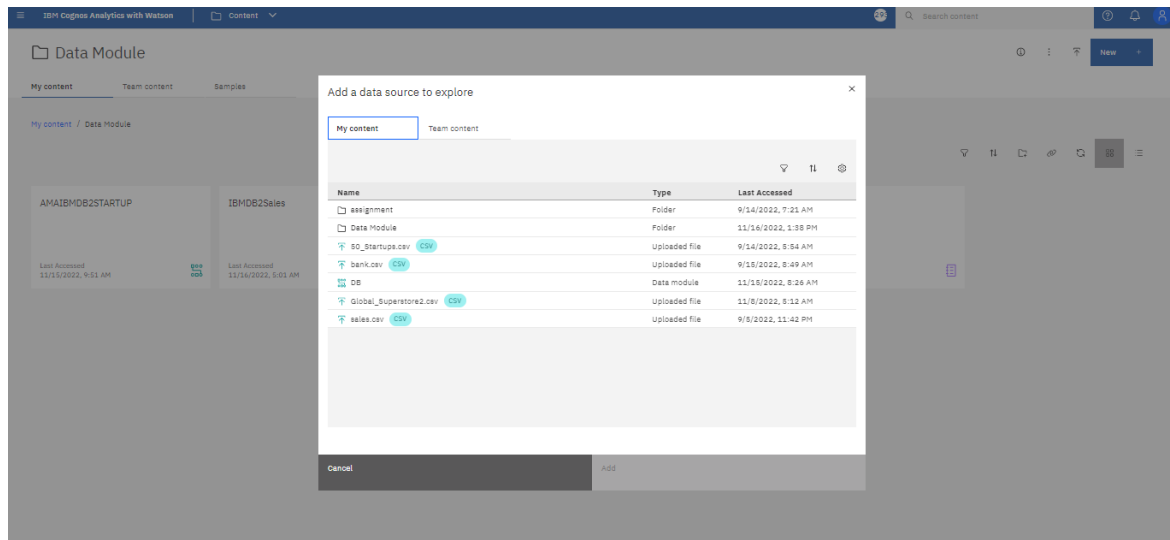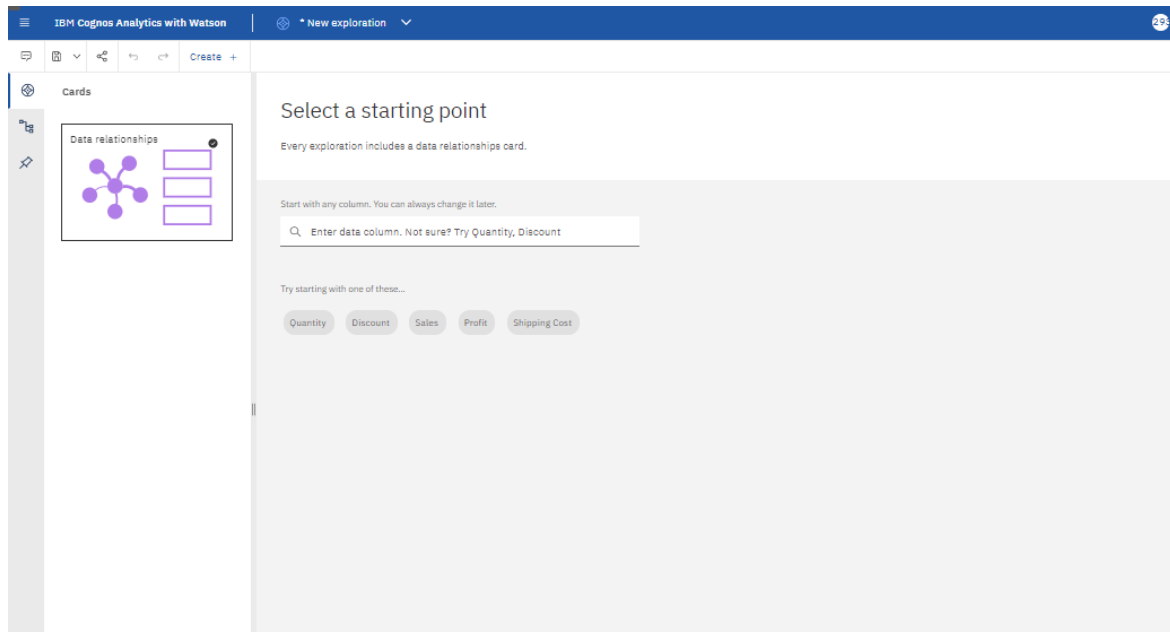Create +   5/5   Column   Related   Compare   Analytics   Details   Fields   Properties

Cards

Sales

12.6M

Sales by Catego...lored by State

Profit and Ship... Region regions

Sales and Profit by Country

Data relationships

Sales and Profit by Country

Measures
● Profit ● Sales

Values

2,400,000
2,200,000
2,000,000
1,800,000
1,600,000
1,400,000
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0

United States   China   India   United Kingdom   France   Germany   Australia   Mexico   Spain   El Salvador

Country

Details

Profit ranges from over 42 thousand, in El Salvador, to over 286 thousand, in United States.

Sales ranges from nearly 178 thousand, in El Salvador, to nearly 2.3 million, in United States.

Profit is unusually high in United States.

The total number of results for **Sales**, across all **countries**, is over 27 thousand.

Over all **countries**, the average of **Sales** is 281.8.

The most common value of **Country** is United States, occurring nearly ten thousand times, which is 37 % of the total.

The total number of results for **Profit**, across all **countries**, is over 27 thousand.

Over all **countries**, the average of **Profit** is 44.3.