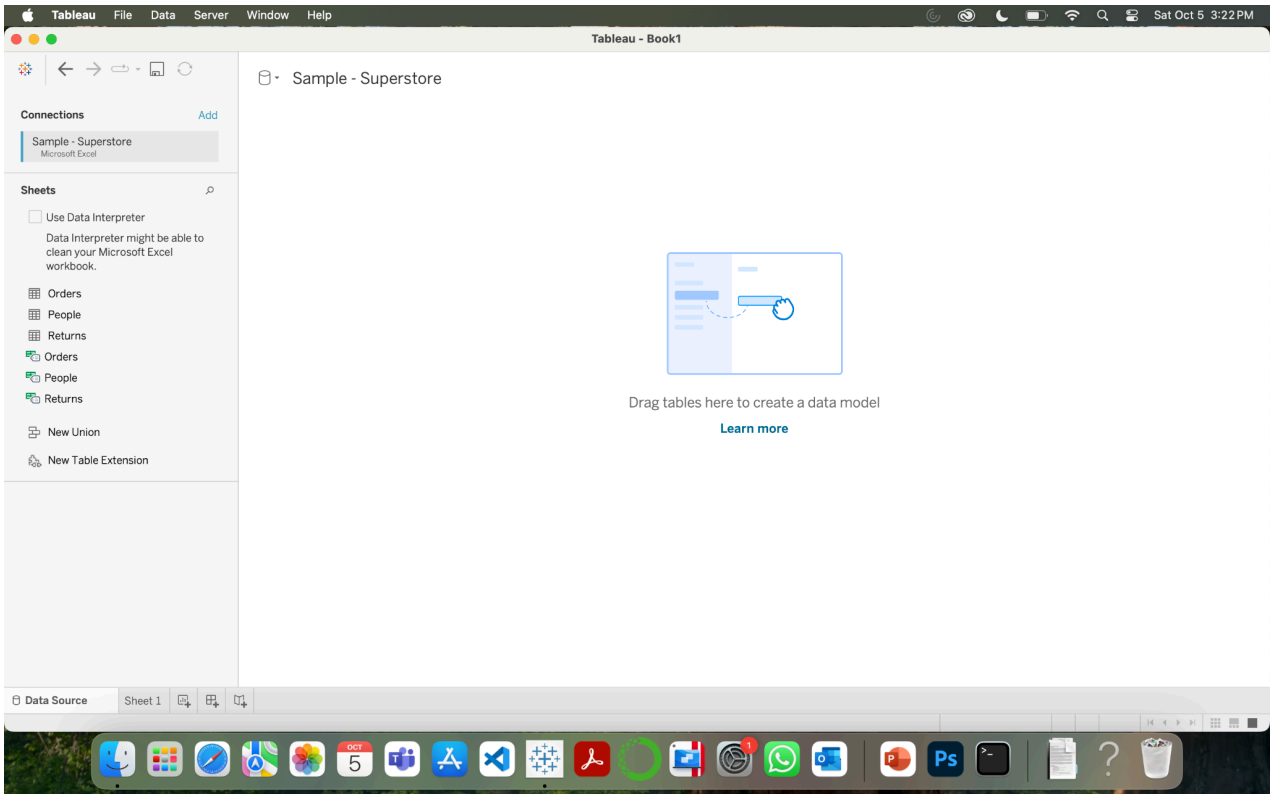
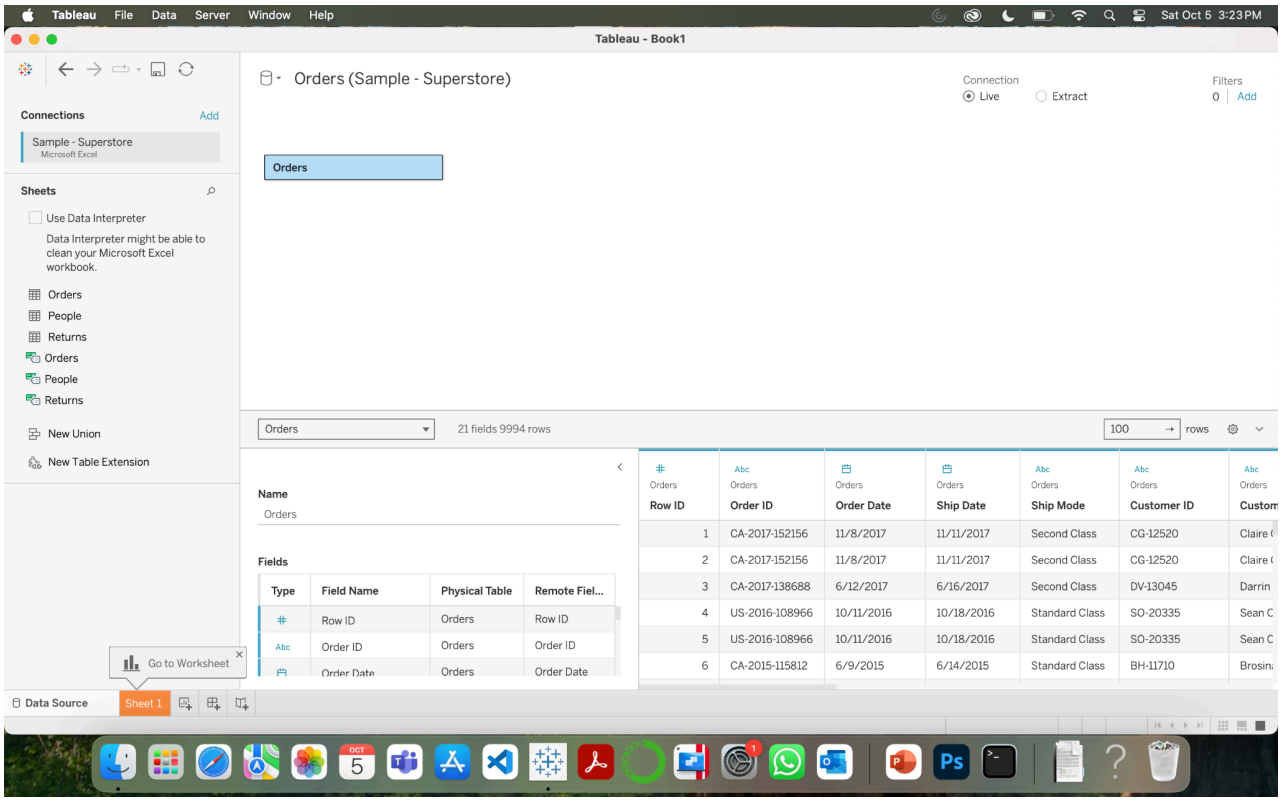
Name: Sai Sandhya Nannapaneni
ID: 11683731

TASK -1

Step 1 : Connecting the Sample-Superstore excel file.

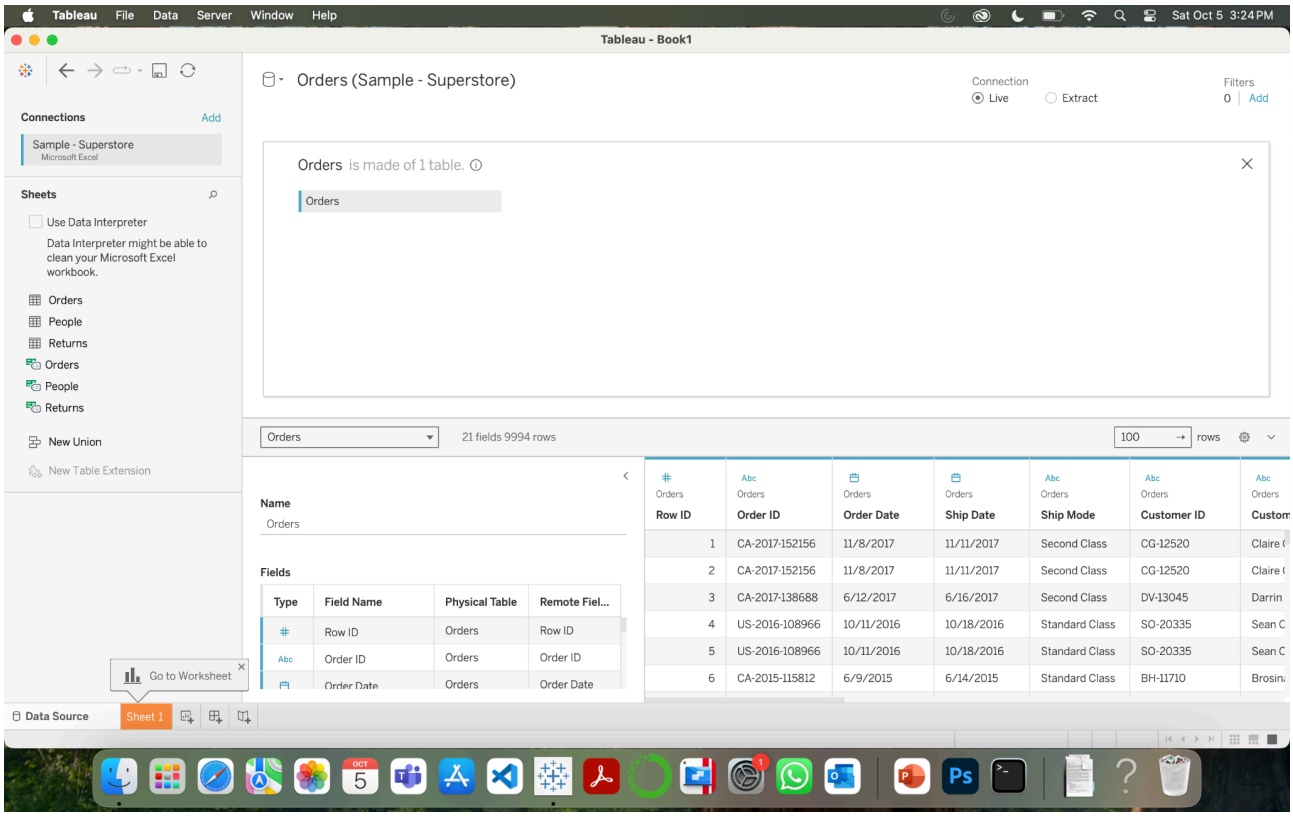


Step 2: In the Data Source tab we are dragging the Orders table from the left pane to the data canvas and the table will be displayed.



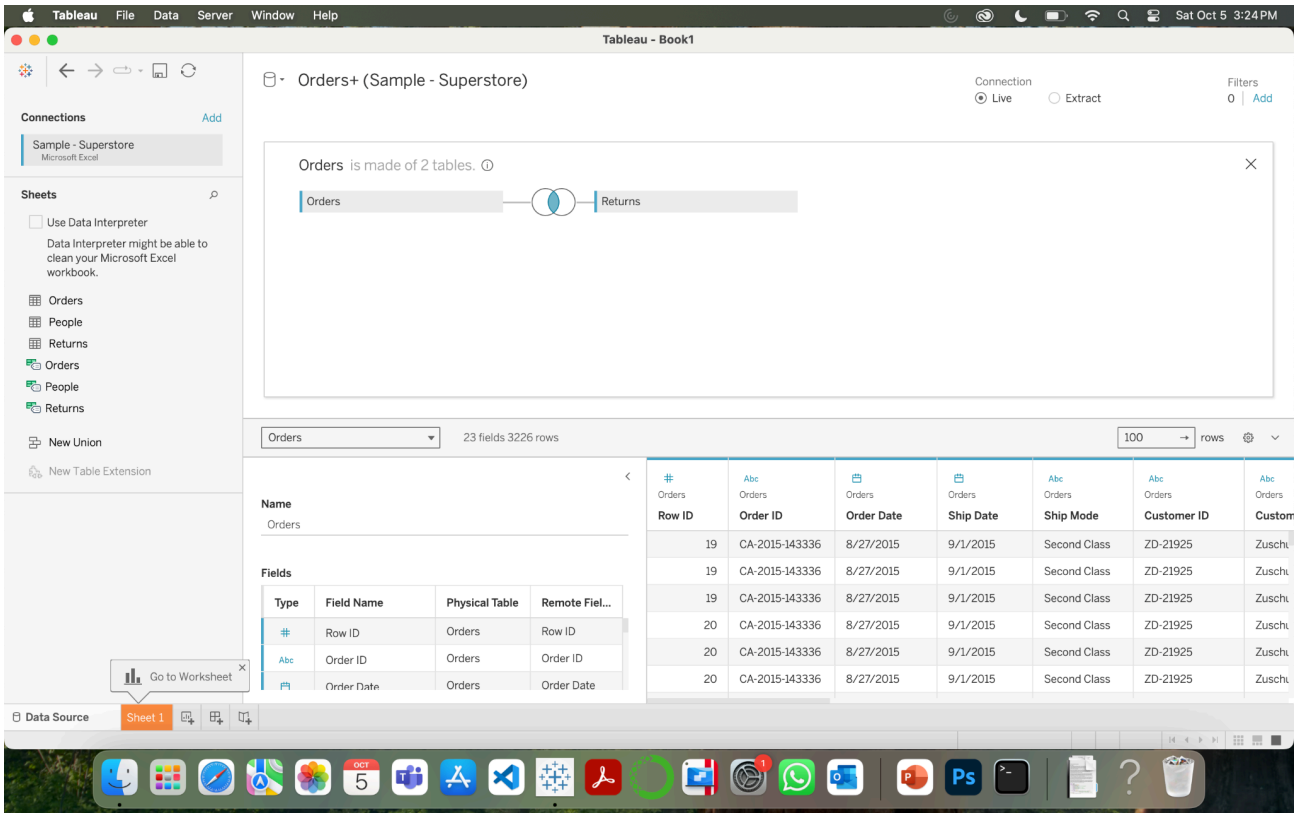
Step 3:

The Order Table will be displayed after double clicking on the Orders Table box.



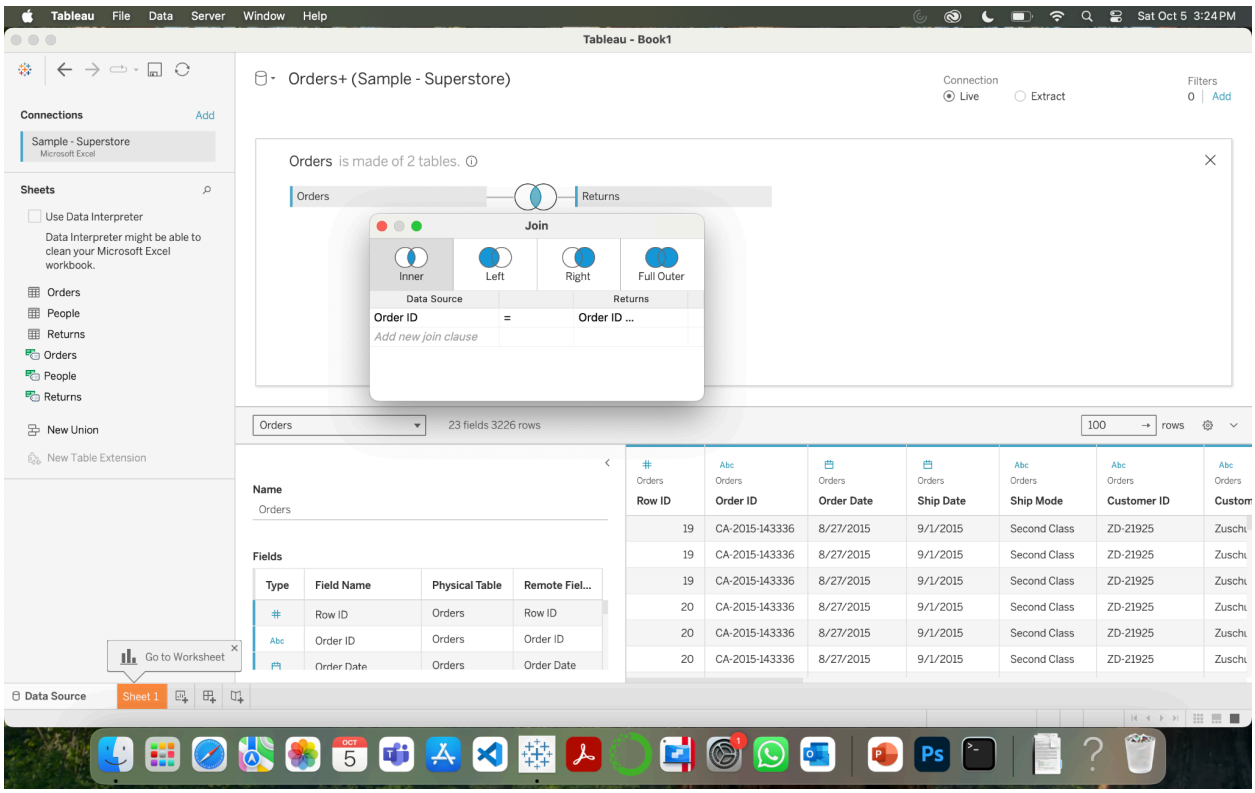
Step 4:

Adding the Return table onto the canvas and join it to orders



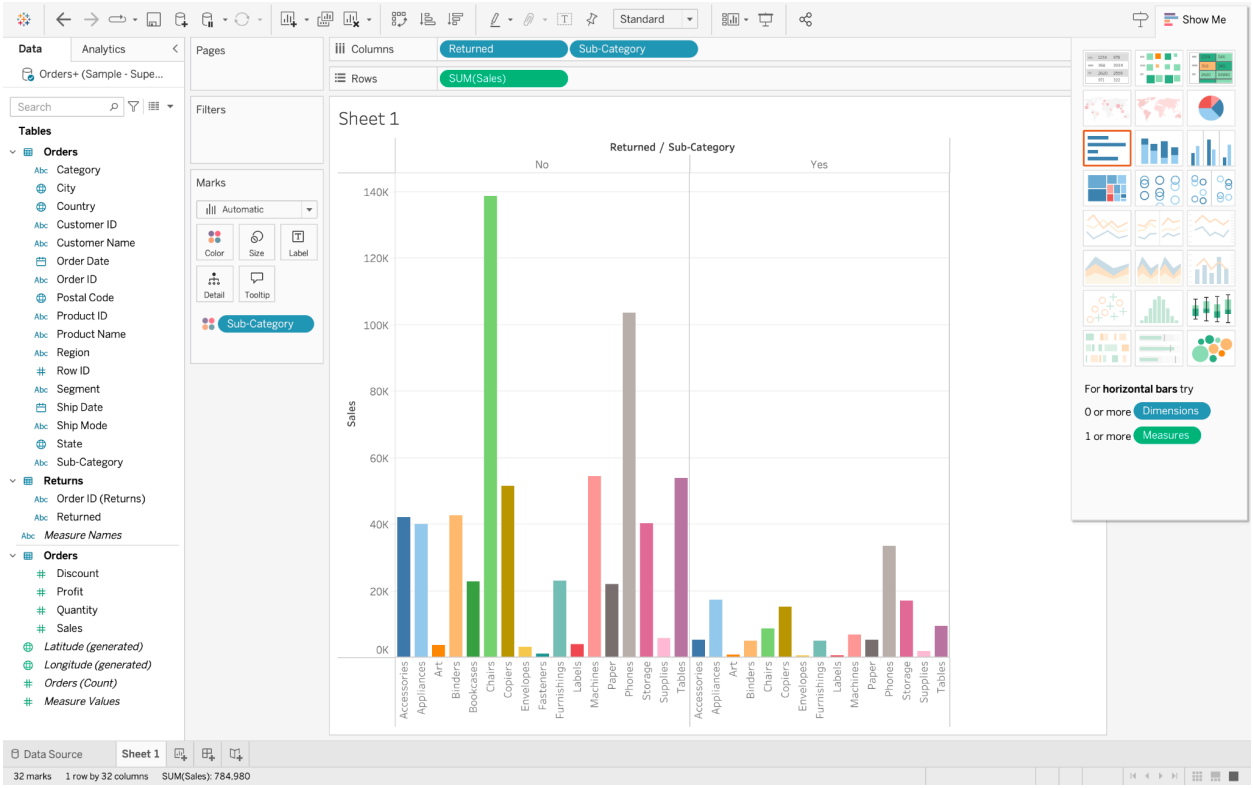
Step 5

Joining the return to orders based on order id using the Inner join.



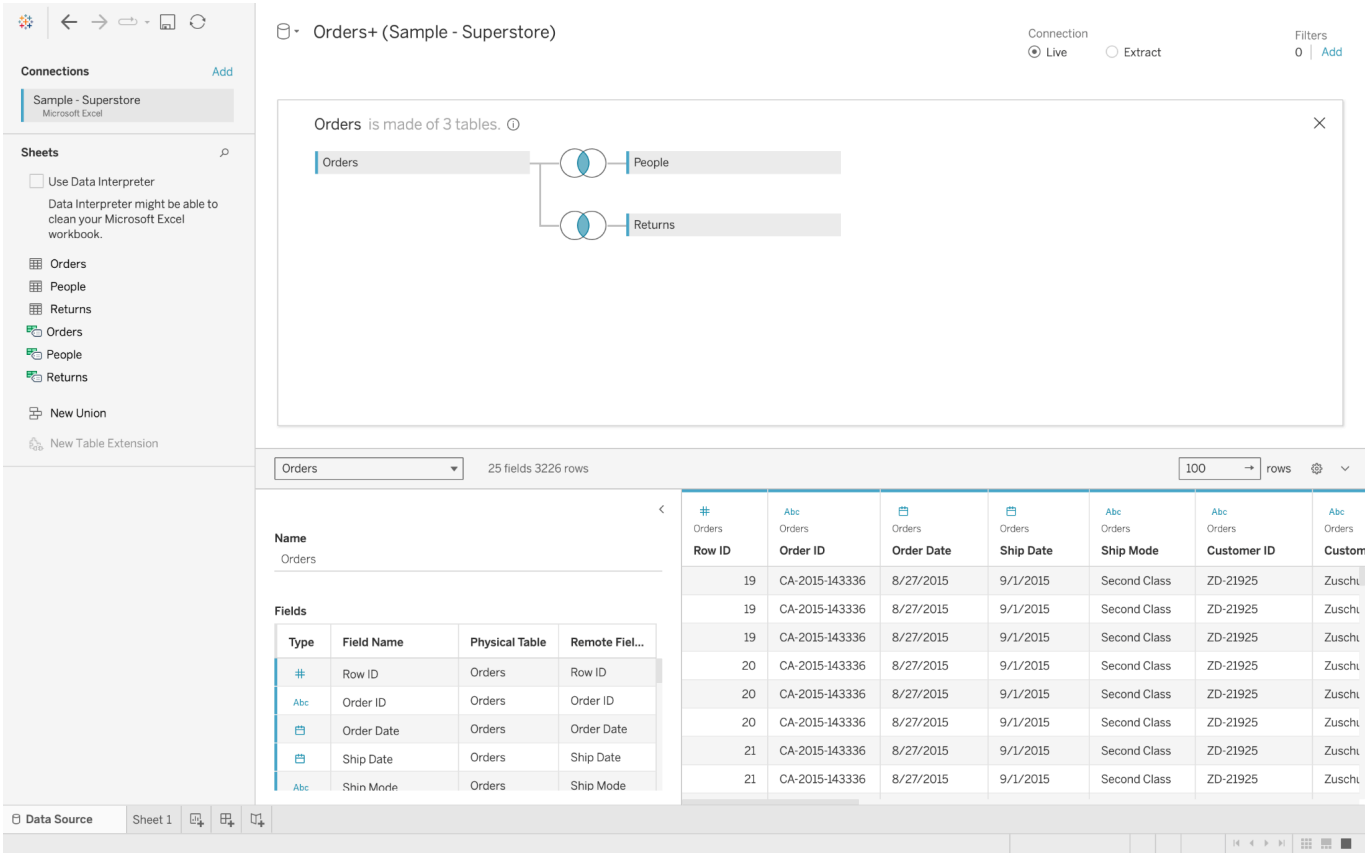
Step 6

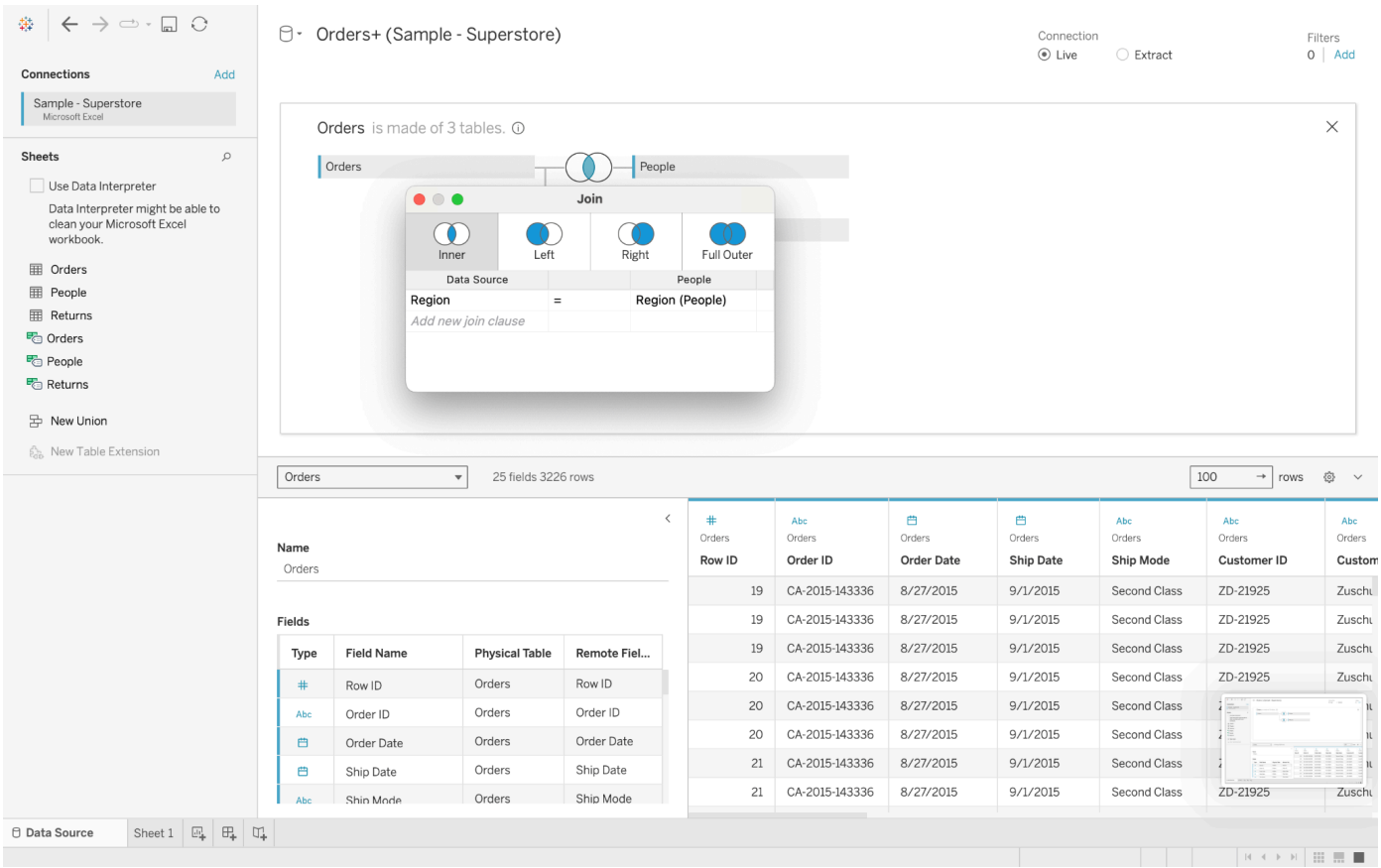
Creating the sheet 1 and building the visualization. Showing Sales by Sub-Category with colors representing whether items are returned or not.



Step 7

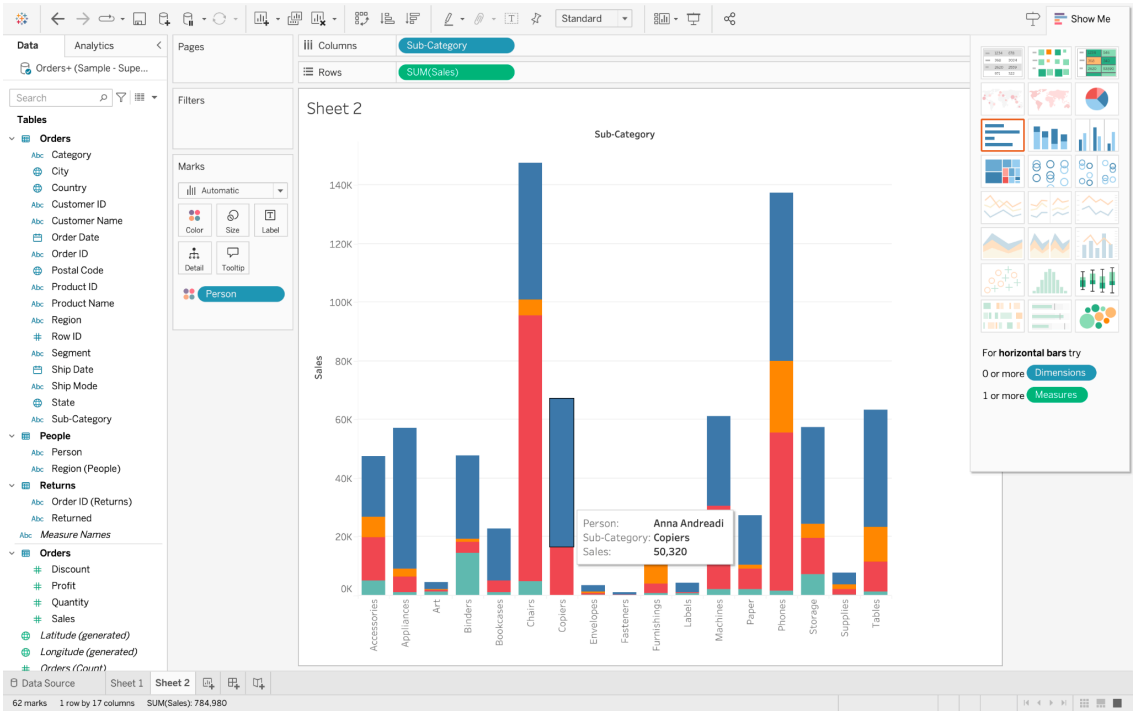
Add the people table to the data source and join it with orders on Customer Name and person from people using inner join





Step 8 :

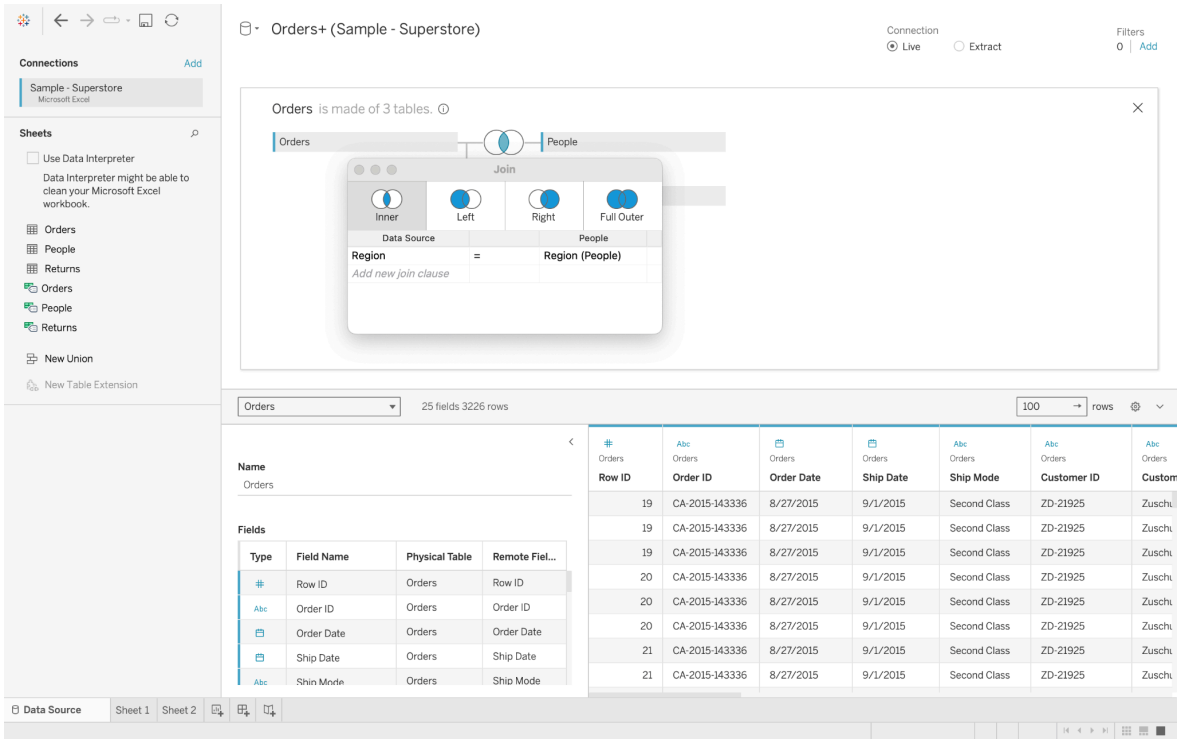
Creating the step 2 and building the visualization. Placing the Sales in row, sub-category on columns and people to the color shelf.

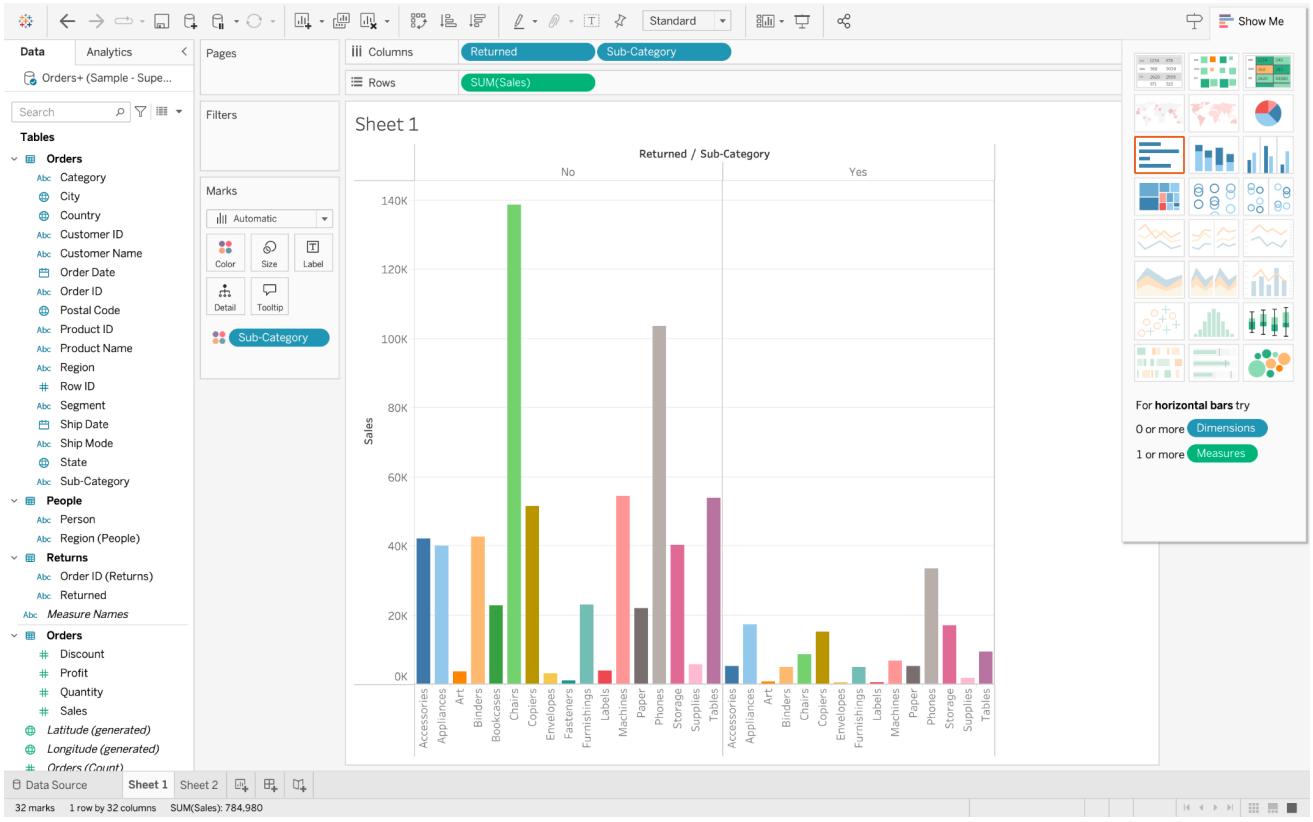


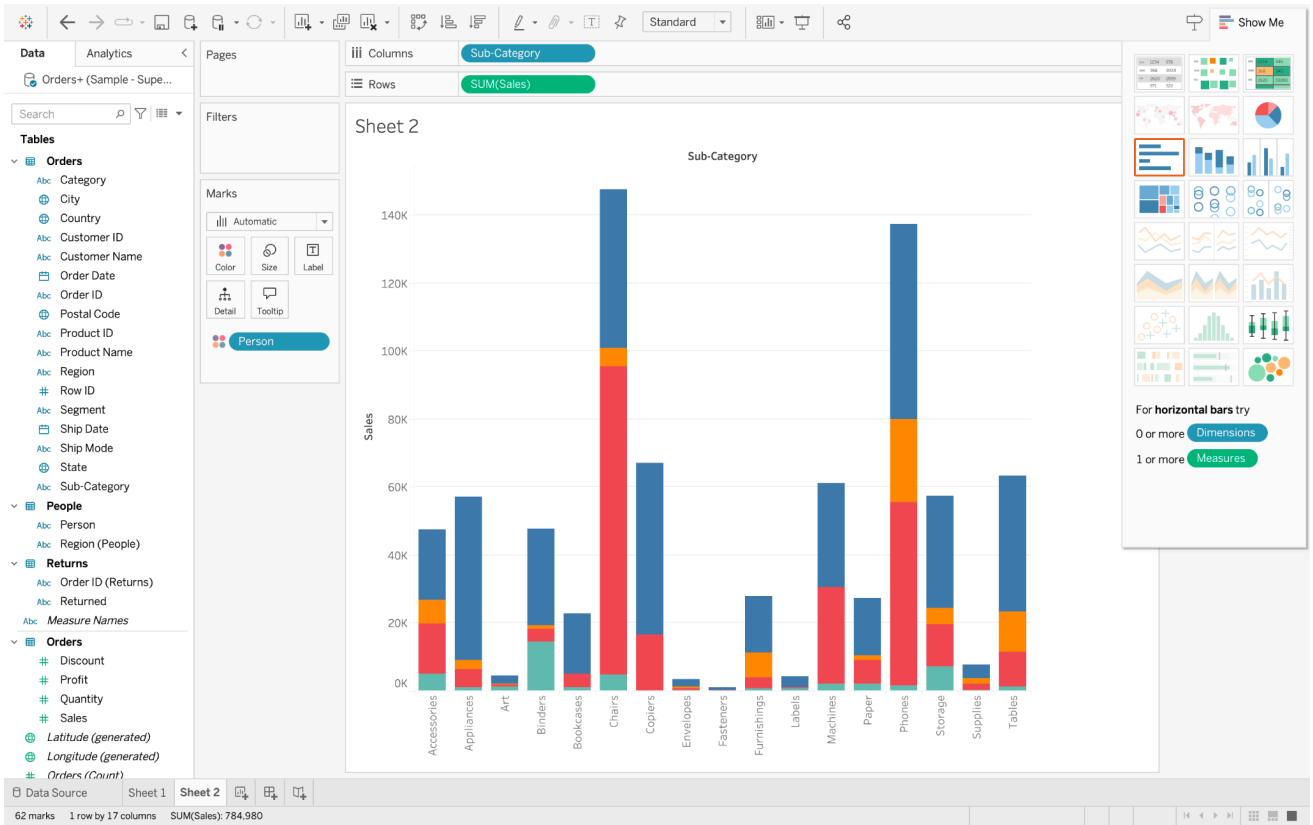
QUESTION 1

-> Analyzing the impact of joins and visualizing the changes.

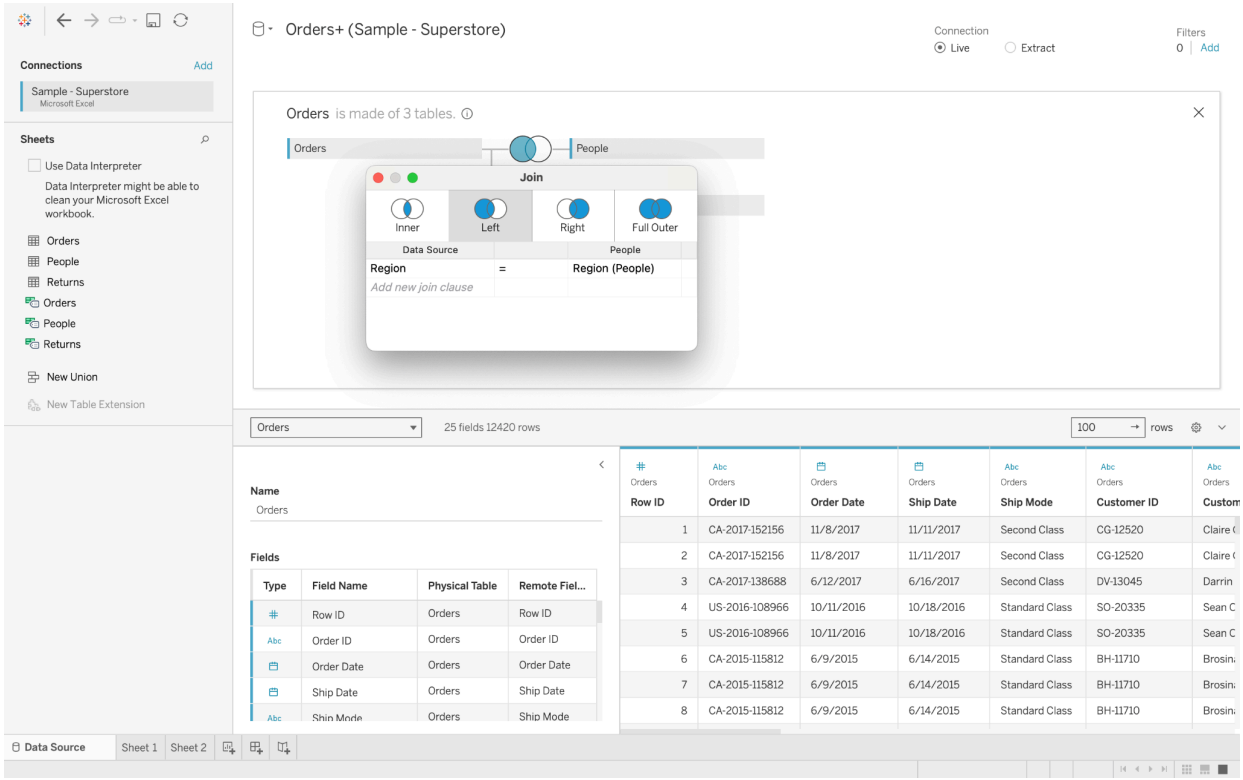
=> Inner Joins

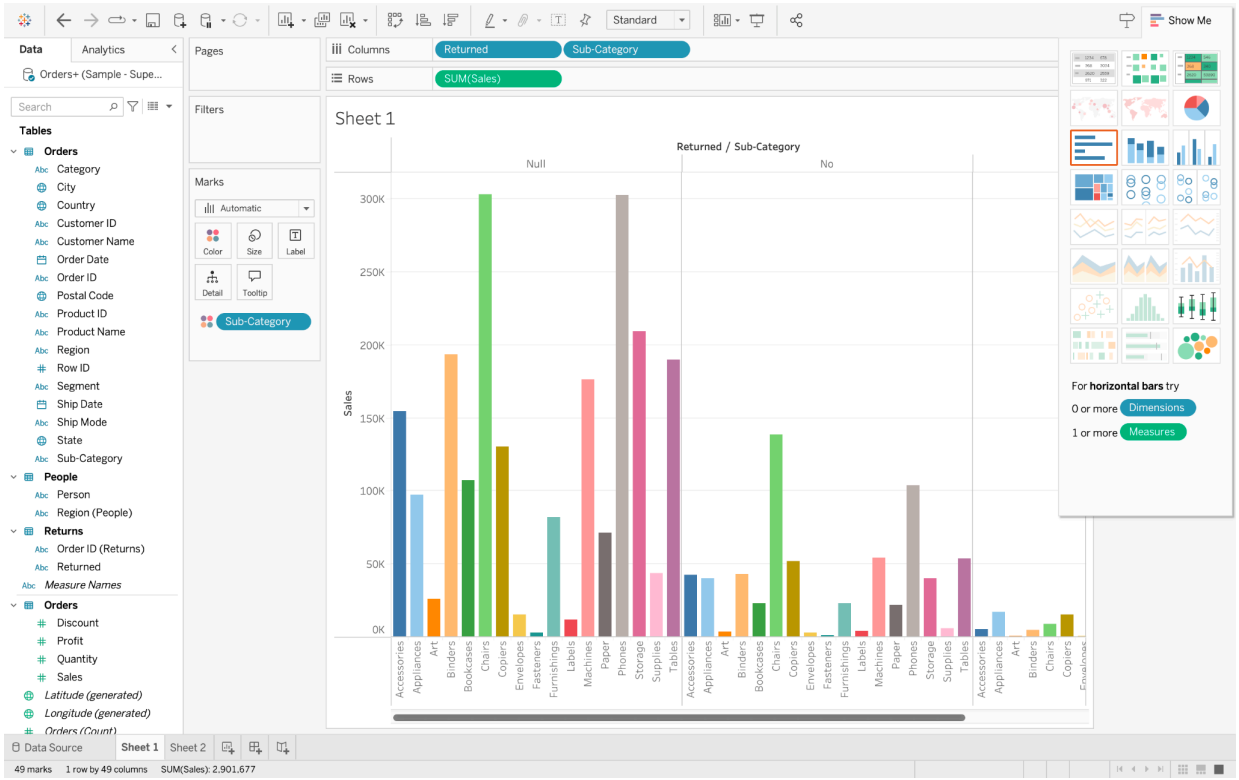


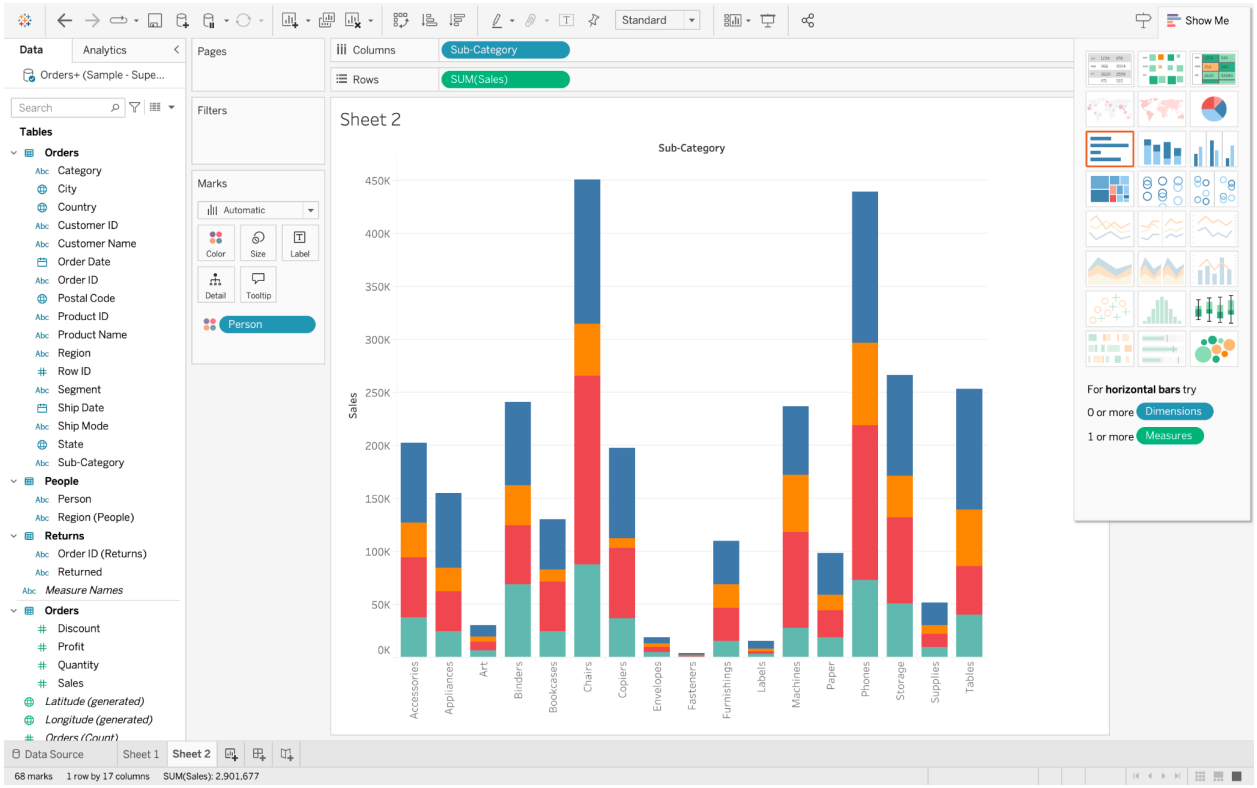

Data
Analytics
Orders+ (Sample - Supe...
Search
Tables
Orders
Category
City
Country
Customer ID
Customer Name
Order Date
Order ID
Postal Code
Product ID
Product Name
Region
Row ID
Segment
Ship Date
Ship Mode
State
Sub-Category
People
Person
Region (People)
Returns
Order ID (Returns)
Returned
Measure Names
Orders
Discount
Profit
Quantity
Sales
Latitude (generated)
Longitude (generated)
Orders (Count)
Pages
Filters
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Sub-Category
Columns
Returned
Sub-Category
Rows
SUM(Sales)
Standard
Show Me
Sheet 1
Returned / Sub-Category
No
Yes
Sales
140K
120K
100K
80K
60K
40K
20K
0K
Accessories
Appliances
Art
Binders
Bookcases
Chairs
Copiers
Envelopes
Fasteners
Furnishings
Labels
Machines
Paper
Phones
Storage
Supplies
Tables
For horizontal bars try
0 or more Dimensions
1 or more Measures
Data Source
Sheet 1
Sheet 2
32 marks
1 row by 32 columns
SUM(Sales): 784,980


Data
Analytics
Orders+ (Sample - Supe...
Search
Tables
Orders
Category
City
Country
Customer ID
Customer Name
Order Date
Order ID
Postal Code
Product ID
Product Name
Region
Row ID
Segment
Ship Date
Ship Mode
State
Sub-Category
People
Person
Region (People)
Returns
Order ID (Returns)
Returned
Measure Names
Orders
Discount
Profit
Quantity
Sales
Latitude (generated)
Longitude (generated)
Orders (Count)
Pages
Filters
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Person
Columns
Sub-Category
Rows
SUM(Sales)
Standard
Show Me
Sheet 2
Sub-Category
Sales
140K
120K
100K
80K
60K
40K
20K
0K
Accessories
Appliances
Art
Binders
Bookcases
Chairs
Copiers
Envelopes
Fasteners
Furnishings
Labels
Machines
Paper
Phones
Storage
Supplies
Tables
For horizontal bars try
0 or more Dimensions
1 or more Measures
Data Source
Sheet 1
Sheet 2
62 marks
1 row by 17 columns
SUM(Sales): 784,980

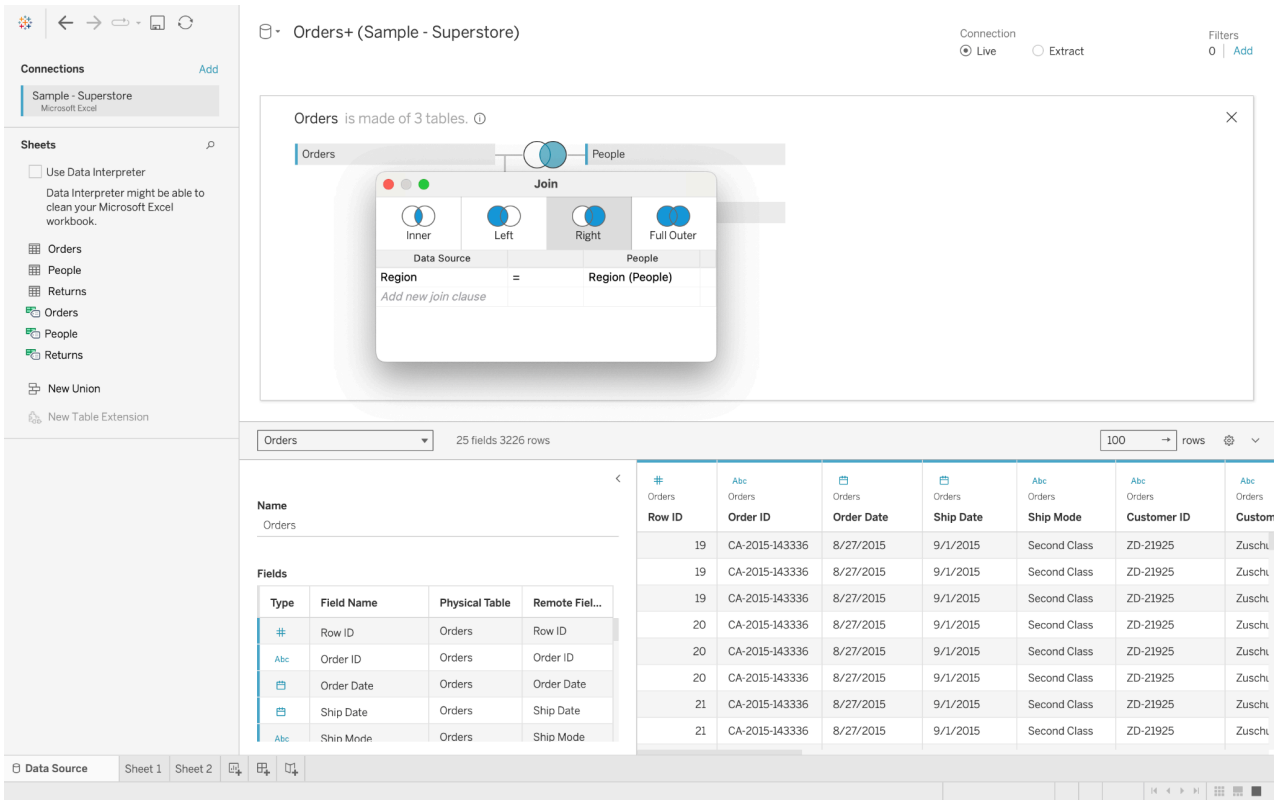
=> Left Join

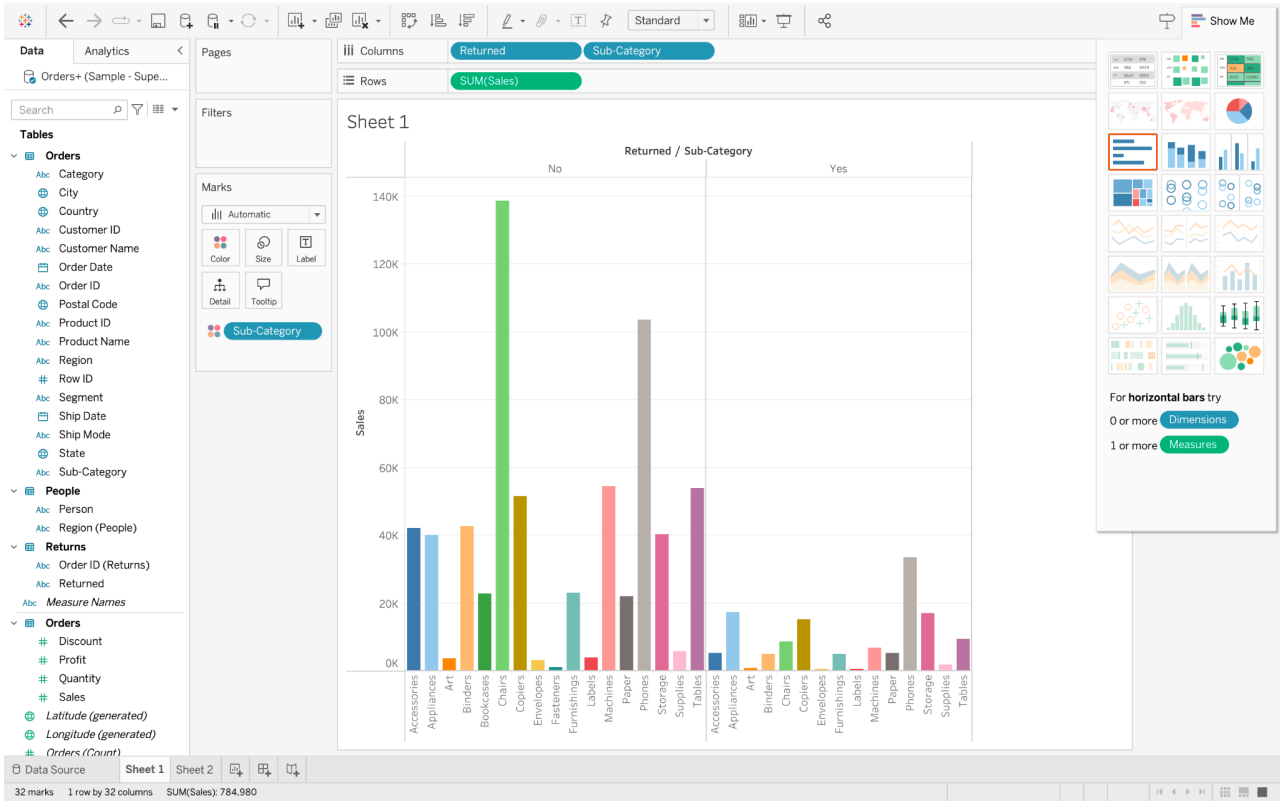

Orders+ (Sample - Superstore)
Connection
Live
Extract
Filters
0 | Add
Connections
Add
Sample - Superstore
Microsoft Excel
Sheets
Use Data Interpreter
Data Interpreter might be able to clean your Microsoft Excel workbook.
Orders
People
Returns
Orders
People
Returns
New Union
New Table Extension
Orders is made of 3 tables.
Orders
People
Join
Inner
Left
Right
Full Outer
Data Source
People
Region
=
Region (People)
Add new join clause
Orders
25 fields 12420 rows
100
rows
Name
Orders
Fields
Type
Field Name
Physical Table
Remote Fiel...
Row ID
Order ID
Order Date
Ship Date
Ship Mode
Customer ID
Row ID
Order ID
Order Date
Ship Date
Ship Mode
Customer ID
1 CA-2017-152156 11/8/2017 11/11/2017 Second Class CG-12520
2 CA-2017-152156 11/8/2017 11/11/2017 Second Class CG-12520
3 CA-2017-138688 6/12/2017 6/16/2017 Second Class DV-13045
4 US-2016-108966 10/11/2016 10/18/2016 Standard Class SO-20335
5 US-2016-108966 10/11/2016 10/18/2016 Standard Class SO-20335
6 CA-2015-115812 6/9/2015 6/14/2015 Standard Class BH-11710
7 CA-2015-115812 6/9/2015 6/14/2015 Standard Class BH-11710
8 CA-2015-115812 6/9/2015 6/14/2015 Standard Class BH-11710
Data Source
Sheet 1
Sheet 2

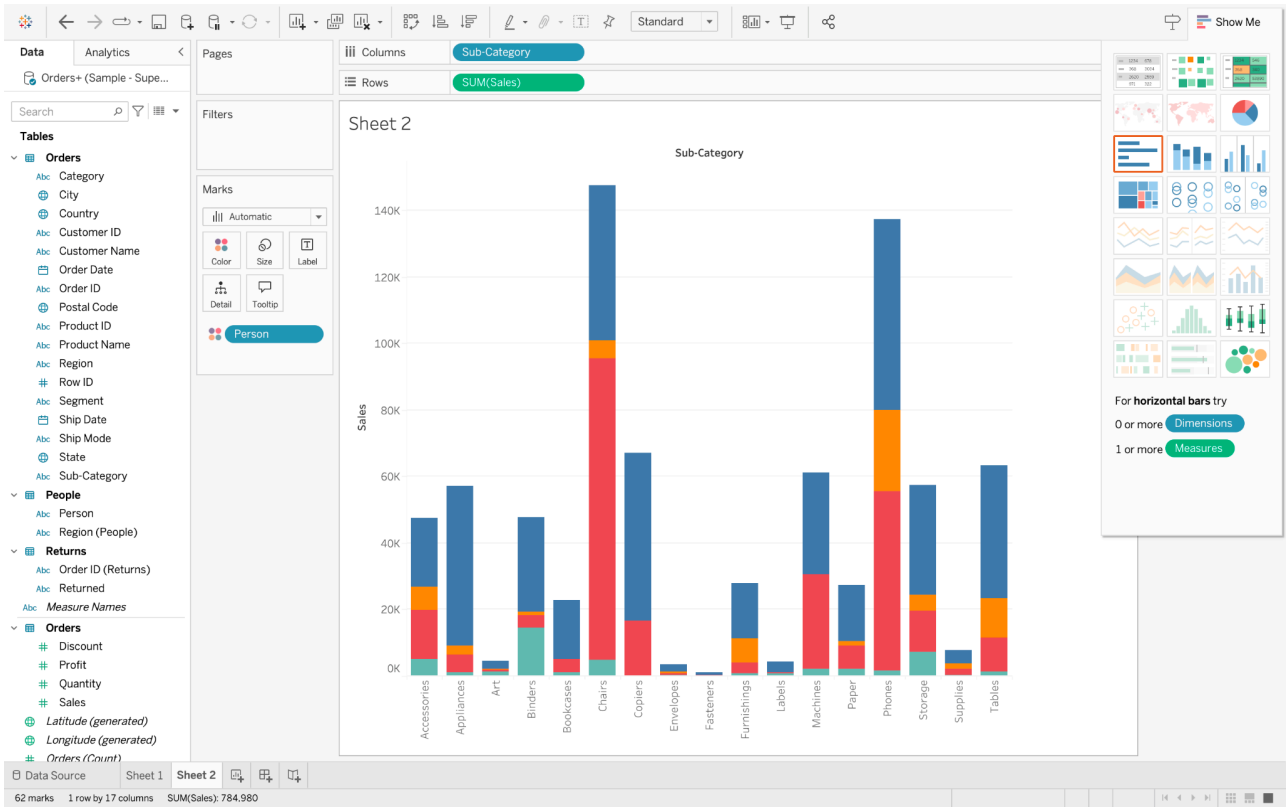

Standard
Show Me
Data
Analytics
Orders+ (Sample - Supe...
Search
Tables
Orders
Category
City
Country
Customer ID
Customer Name
Order Date
Order ID
Postal Code
Product ID
Product Name
Region
Row ID
Segment
Ship Date
Ship Mode
State
Sub-Category
People
Person
Region (People)
Returns
Order ID (Returns)
Returned
Measure Names
Orders
Discount
Profit
Quantity
Sales
Latitude (generated)
Longitude (generated)
Orders (Count)
Pages
Filters
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Sub-Category
Columns
Returned
Sub-Category
Rows
SUM(Sales)
Sheet 1
Returned / Sub-Category
Null
No
Sales
300K
250K
200K
150K
100K
50K
0K
Accessories
Appliances
Art
Binders
Bookcases
Chairs
Copiers
Envelopes
Fasteners
Furnishings
Labels
Machines
Paper
Phones
Storage
Supplies
Tables
For horizontal bars try
0 or more Dimensions
1 or more Measures
Data Source
Sheet 1
Sheet 2
49 marks
1 row by 49 columns
SUM(Sales): 2,901,677


Data
Analytics
Orders+ (Sample - Supe...
Search
Tables
Orders
Category
City
Country
Customer ID
Customer Name
Order Date
Order ID
Postal Code
Product ID
Product Name
Region
Row ID
Segment
Ship Date
Ship Mode
State
Sub-Category
People
Person
Region (People)
Returns
Order ID (Returns)
Returned
Measure Names
Orders
Discount
Profit
Quantity
Sales
Latitude (generated)
Longitude (generated)
Orders (Count)
Pages
Filters
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Person
Columns
Sub-Category
Rows
SUM(Sales)
Standard
Show Me
Sheet 2
Sub-Category
Sales
450K
400K
350K
300K
250K
200K
150K
100K
50K
0K
Accessories
Appliances
Art
Binders
Bookcases
Chairs
Copiers
Envelopes
Fasteners
Furnishings
Labels
Machines
Paper
Phones
Storage
Supplies
Tables
For horizontal bars try
0 or more
Dimensions
1 or more
Measures
Data Source
Sheet 1
Sheet 2
68 marks
1 row by 17 columns
SUM(Sales): 2,901,677

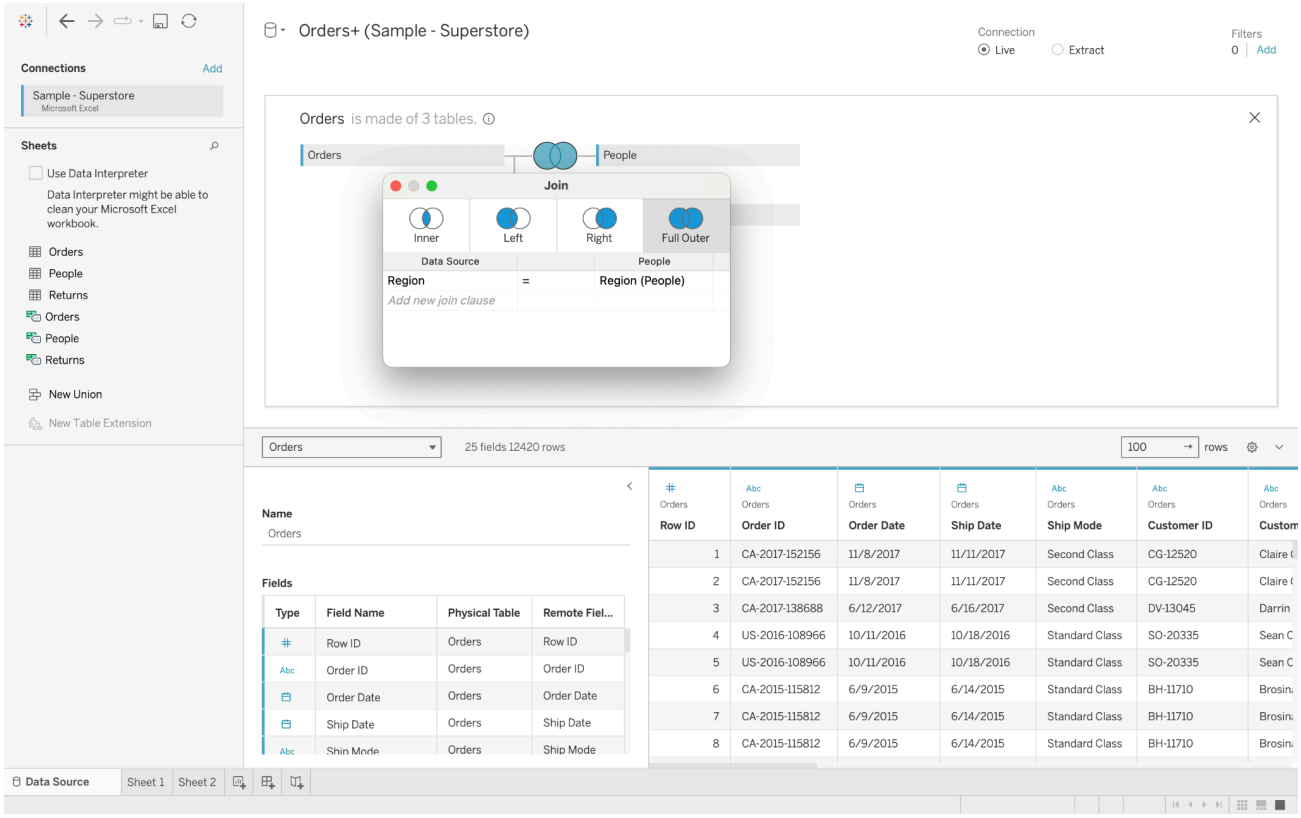
=> Right Join

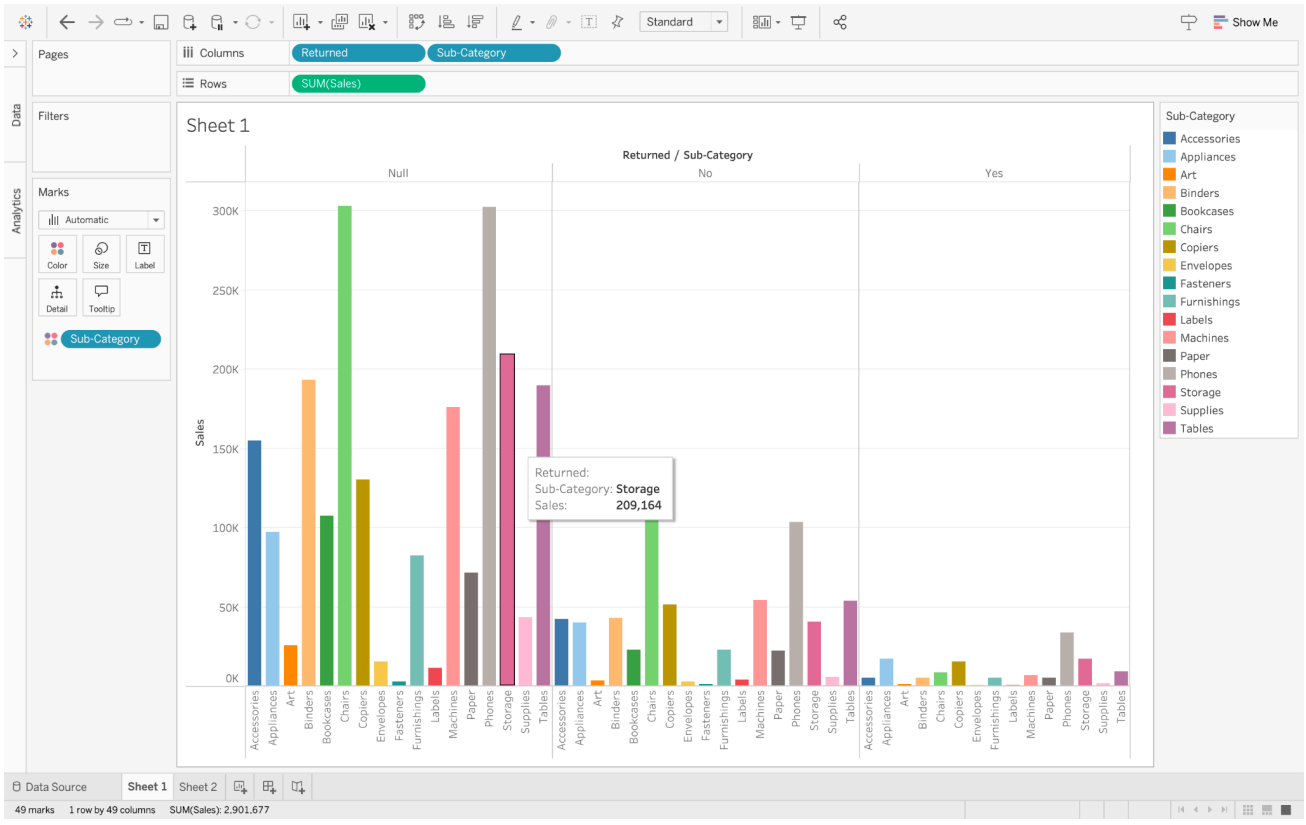

Connections
Add
Sample - Superstore
Microsoft Excel
Sheets
Use Data Interpreter
Data Interpreter might be able to clean your Microsoft Excel workbook.
Orders
People
Returns
Orders
People
Returns
New Union
New Table Extension
Orders+ (Sample - Superstore)
Connection
Live
Extract
Filters
0 | Add
Orders is made of 3 tables.
Orders
People
Join
Inner
Left
Right
Full Outer
Data Source
People
Region
=
Region (People)
Add new join clause
Orders
25 fields 3226 rows
100
rows
Name
Orders
Fields
Type
Field Name
Physical Table
Remote Fiel...
Row ID
Order ID
Order Date
Ship Date
Ship Mode
Orders
Row ID
Order ID
Order Date
Ship Date
Ship Mode
Customer ID
Data Source
Sheet 1
Sheet 2

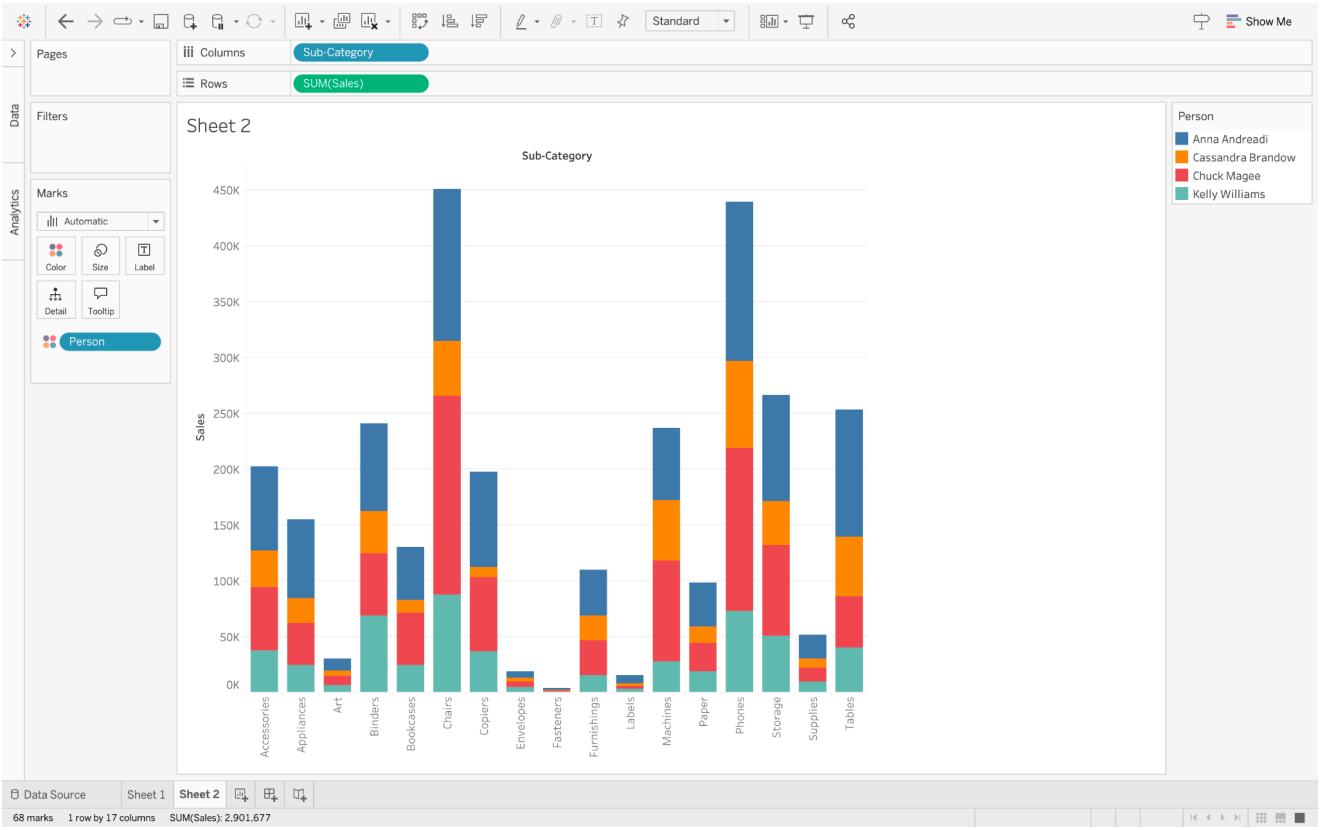

Standard
Show Me
Data
Analytics
Orders+ (Sample - Supe...
Search
Tables
Orders
Category
City
Country
Customer ID
Customer Name
Order Date
Order ID
Postal Code
Product ID
Product Name
Region
Row ID
Segment
Ship Date
Ship Mode
State
Sub-Category
People
Person
Region (People)
Returns
Order ID (Returns)
Returned
Measure Names
Orders
Discount
Profit
Quantity
Sales
Latitude (generated)
Longitude (generated)
Orders (Count)
Pages
Filters
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Sub-Category
Columns
Returned
Sub-Category
Rows
SUM(Sales)
Sheet 1
Returned / Sub-Category
No
Yes
Sales
140K
120K
100K
80K
60K
40K
20K
0K
Accessories
Appliances
Art
Binders
Bookcases
Chairs
Copiers
Envelopes
Fasteners
Furnishings
Labels
Machines
Paper
Phones
Storage
Supplies
Tables
For horizontal bars try
0 or more Dimensions
1 or more Measures
Data Source
Sheet 1
Sheet 2
32 marks
1 row by 32 columns
SUM(Sales): 784,980


Standard
Show Me
Data
Analytics
Orders+ (Sample - Supe...
Search
Tables
Orders
Category
City
Country
Customer ID
Customer Name
Order Date
Order ID
Postal Code
Product ID
Product Name
Region
Row ID
Segment
Ship Date
Ship Mode
State
Sub-Category
People
Person
Region (People)
Returns
Order ID (Returns)
Returned
Measure Names
Orders
Discount
Profit
Quantity
Sales
Latitude (generated)
Longitude (generated)
Orders (Count)
Pages
Filters
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Person
Columns
Sub-Category
Rows
SUM(Sales)
Sheet 2
Sub-Category
Sales
140K
120K
100K
80K
60K
40K
20K
0K
Accessories
Appliances
Art
Binders
Bookcases
Chairs
Copiers
Envelopes
Fasteners
Furnishings
Labels
Machines
Paper
Phones
Storage
Supplies
Tables
For horizontal bars try
0 or more Dimensions
1 or more Measures
Data Source
Sheet 1
Sheet 2
62 marks
1 row by 17 columns
SUM(Sales): 784,980

=>Full Outer Join



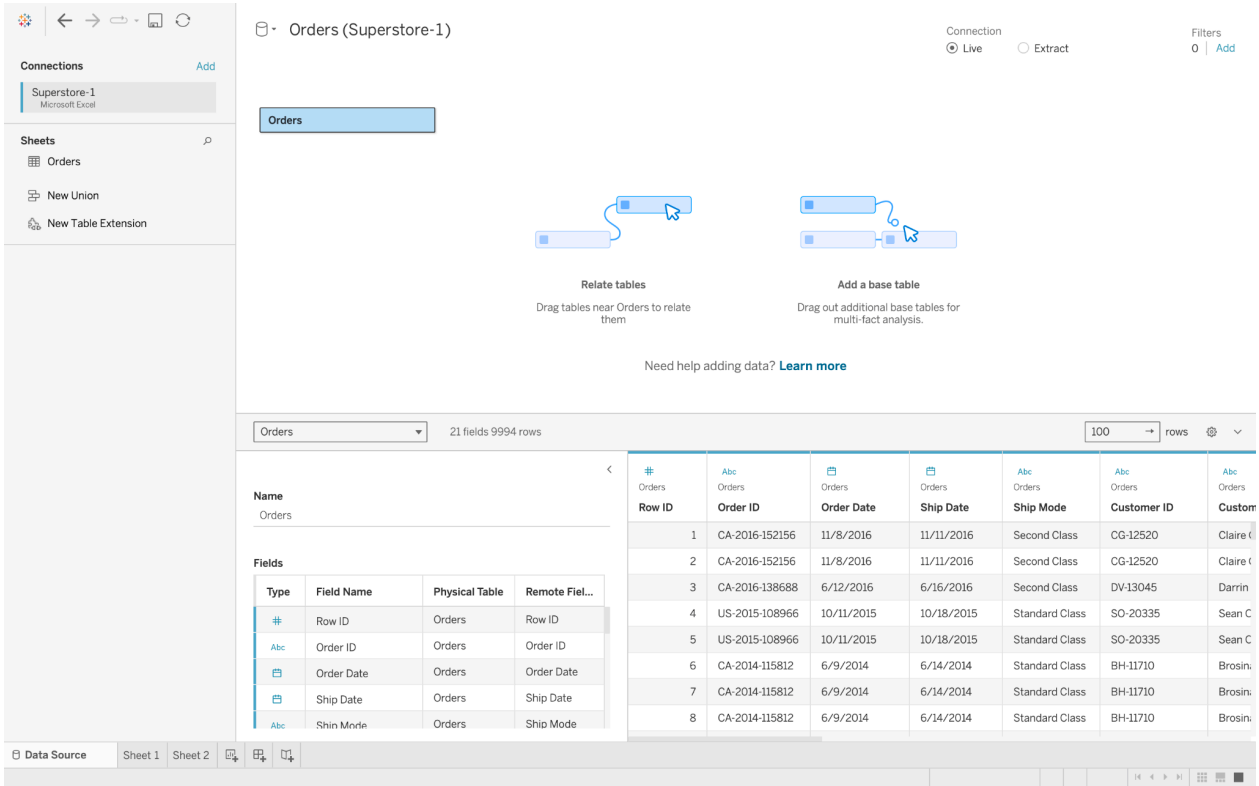




TASK - 2

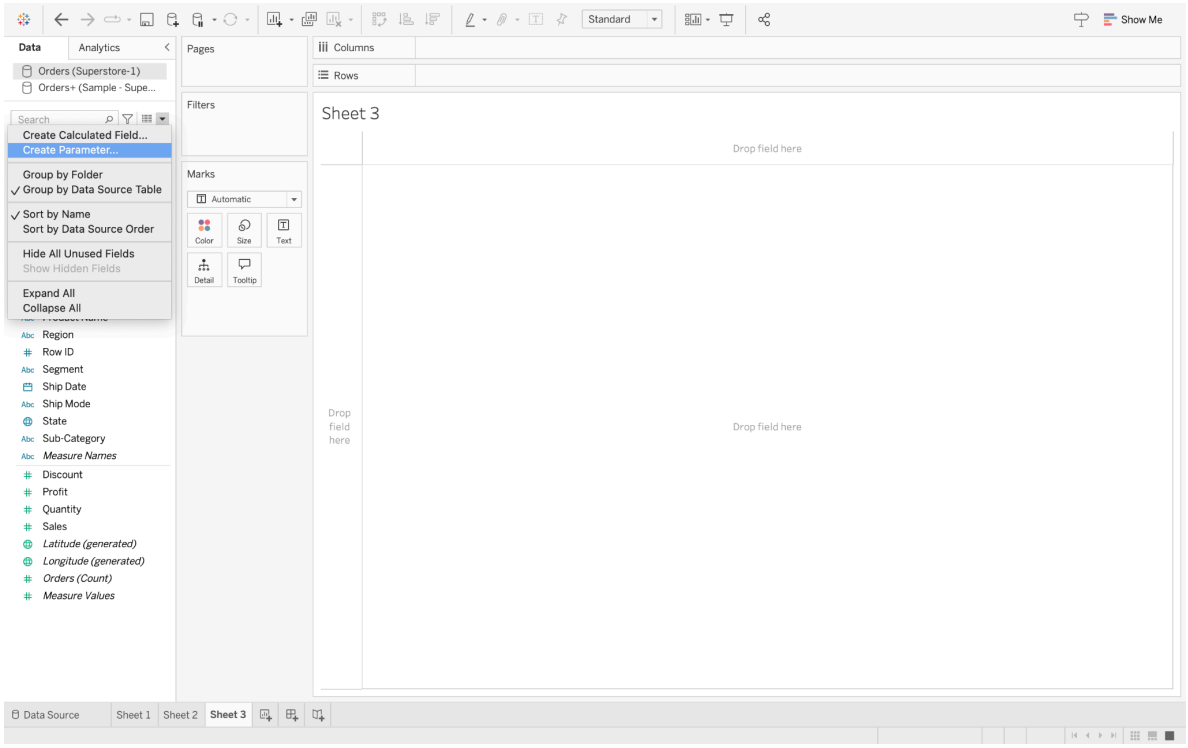
Step 1:

Connecting the Superstore excel file to the data source.



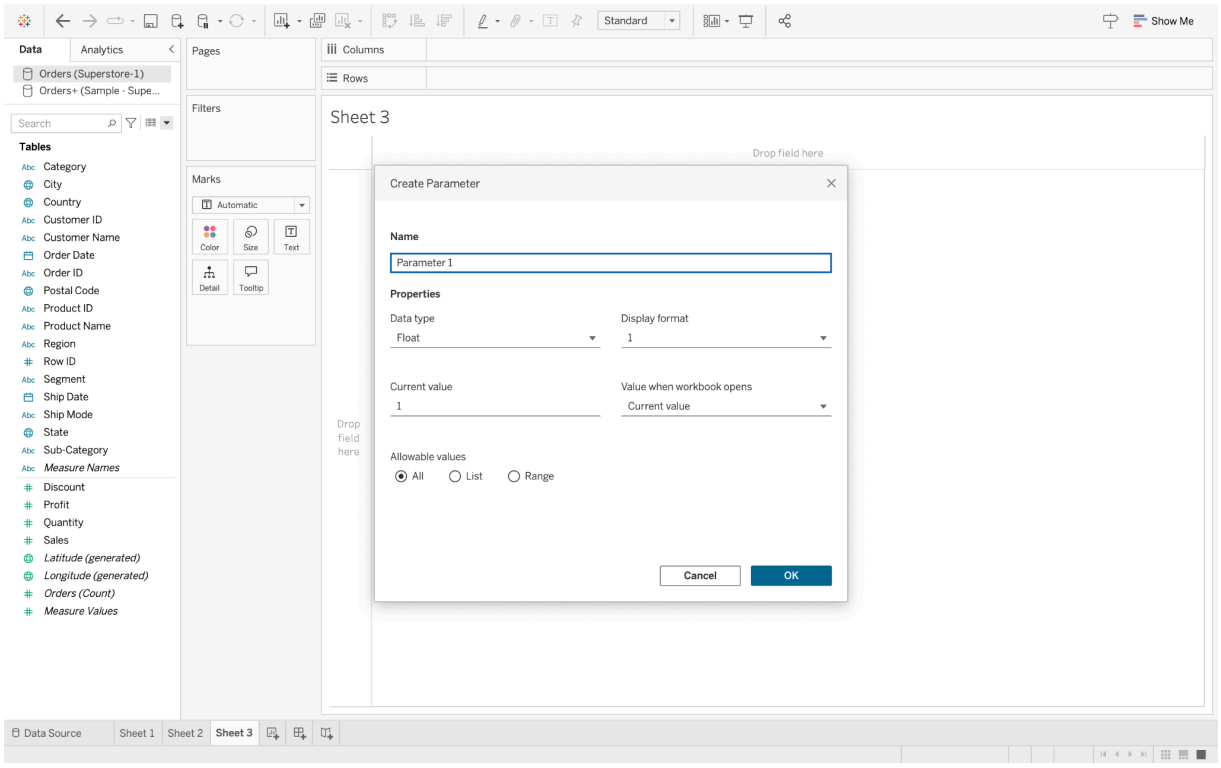
Step 2:

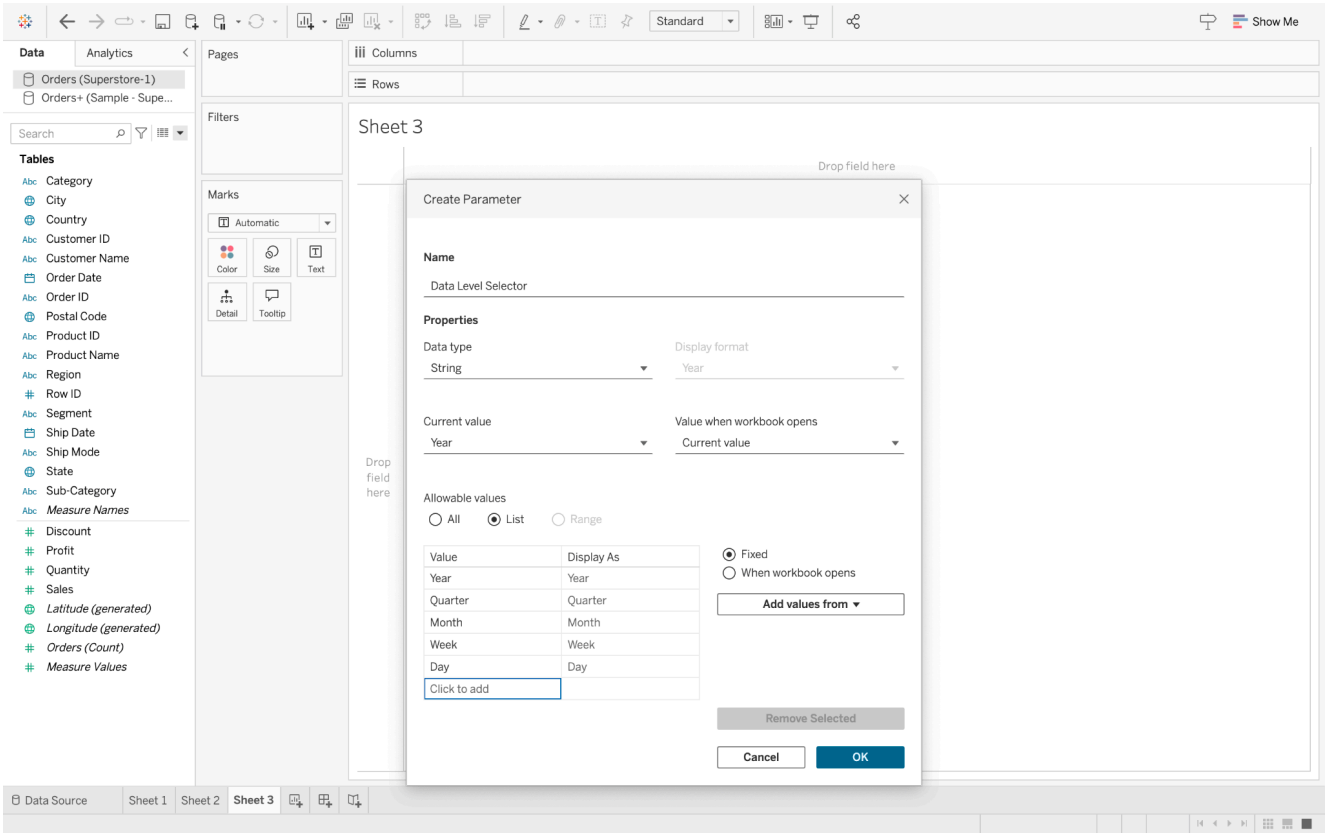
Creating the by selecting the New parameter to open the parameter creation dialog box



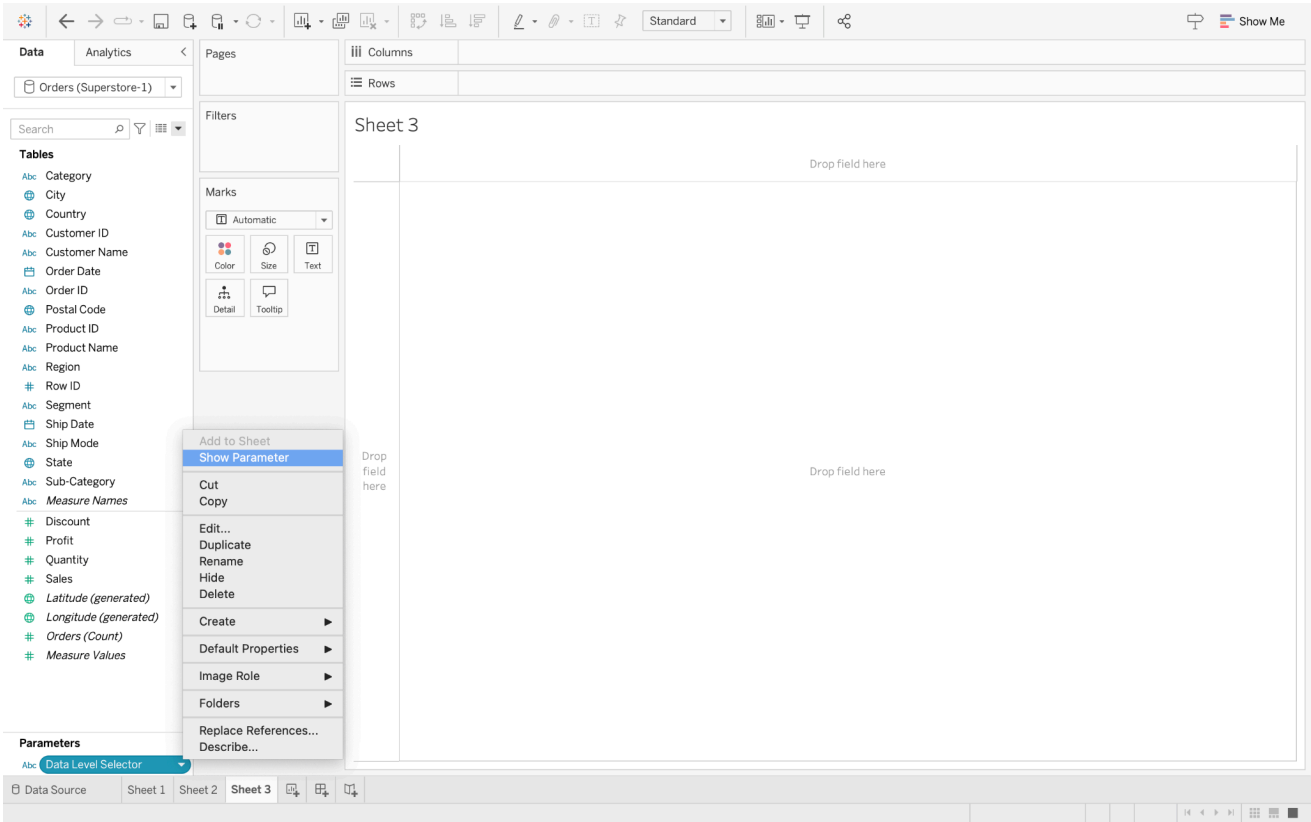
Step 3:

Giving the inputs as Parameter name is Data Level Selector, Data Type as String, and selecting the allowable values as List. Then we give the specific values you want to include in the parameter and click ok.



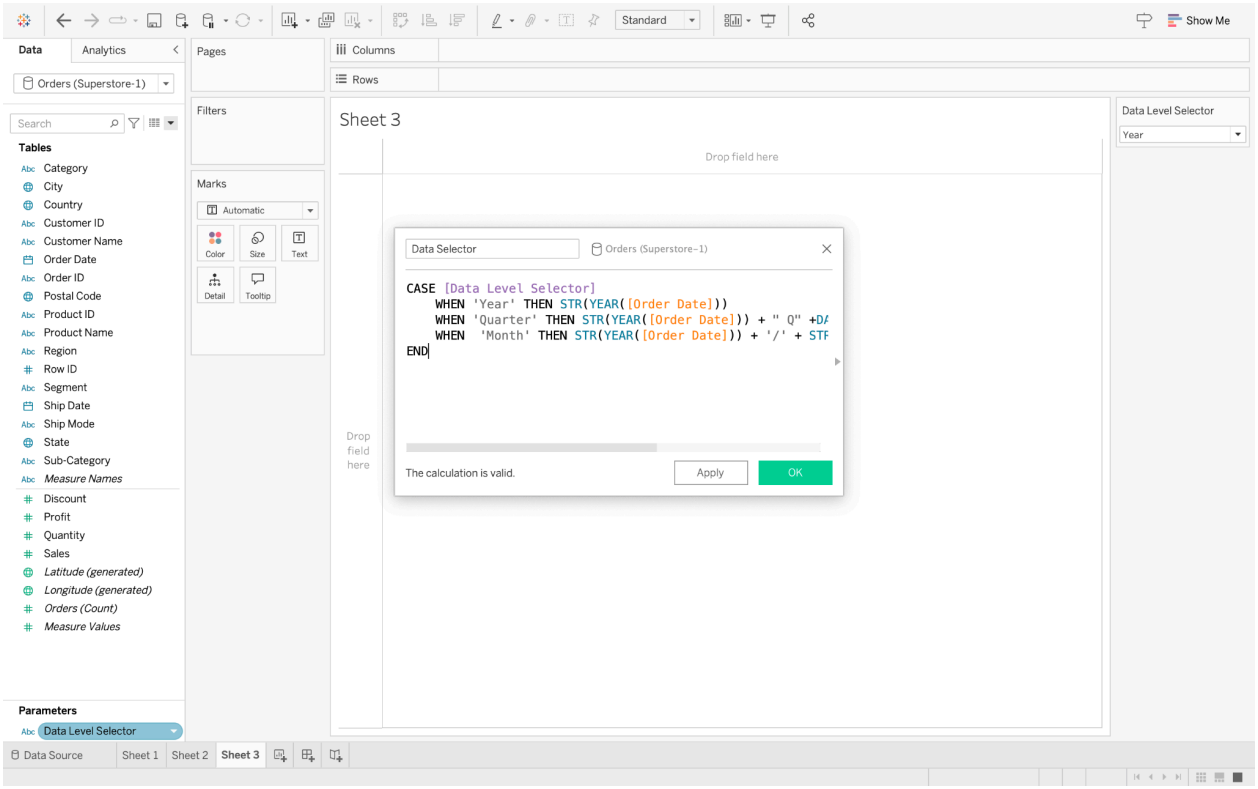


Step 4: Now the newly created parameter is created, right click on that and click on Show parameter.



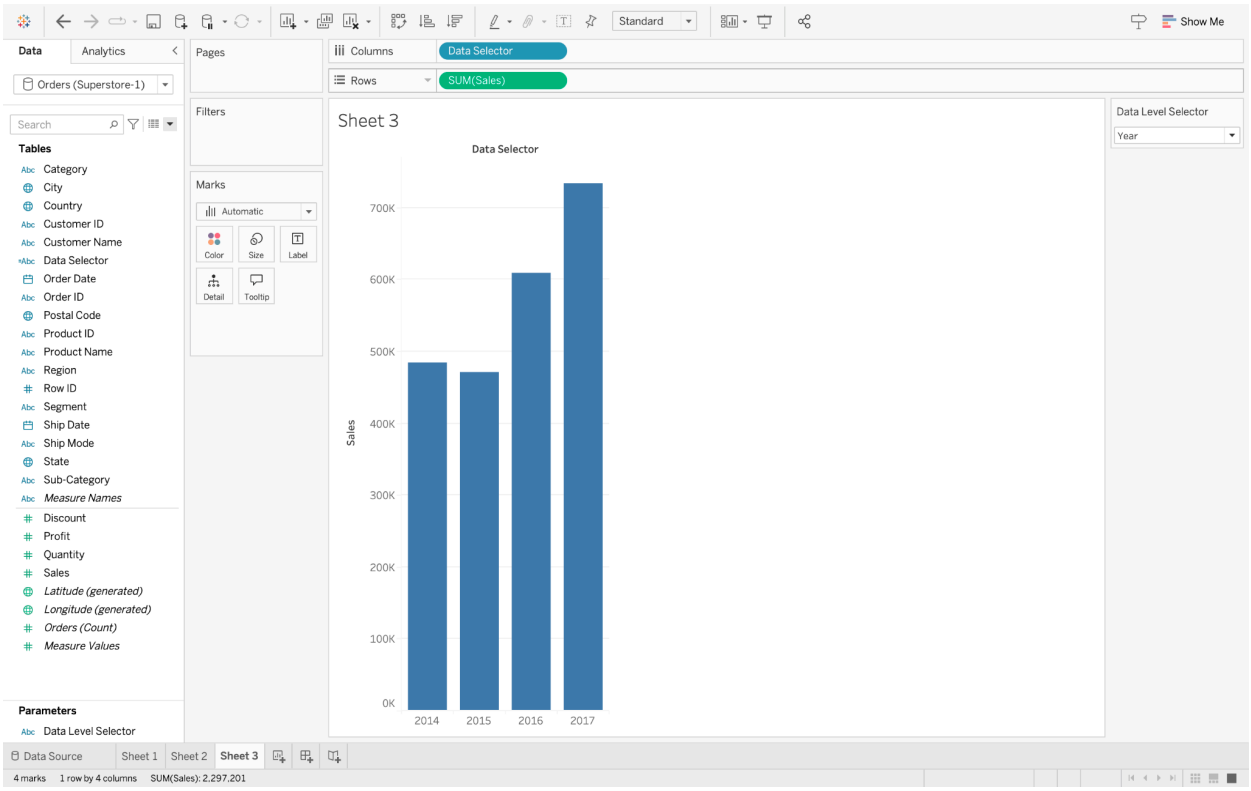
Step 5:

Creating the new calculated field named Date Selector and we will be entering the function and click on OK.

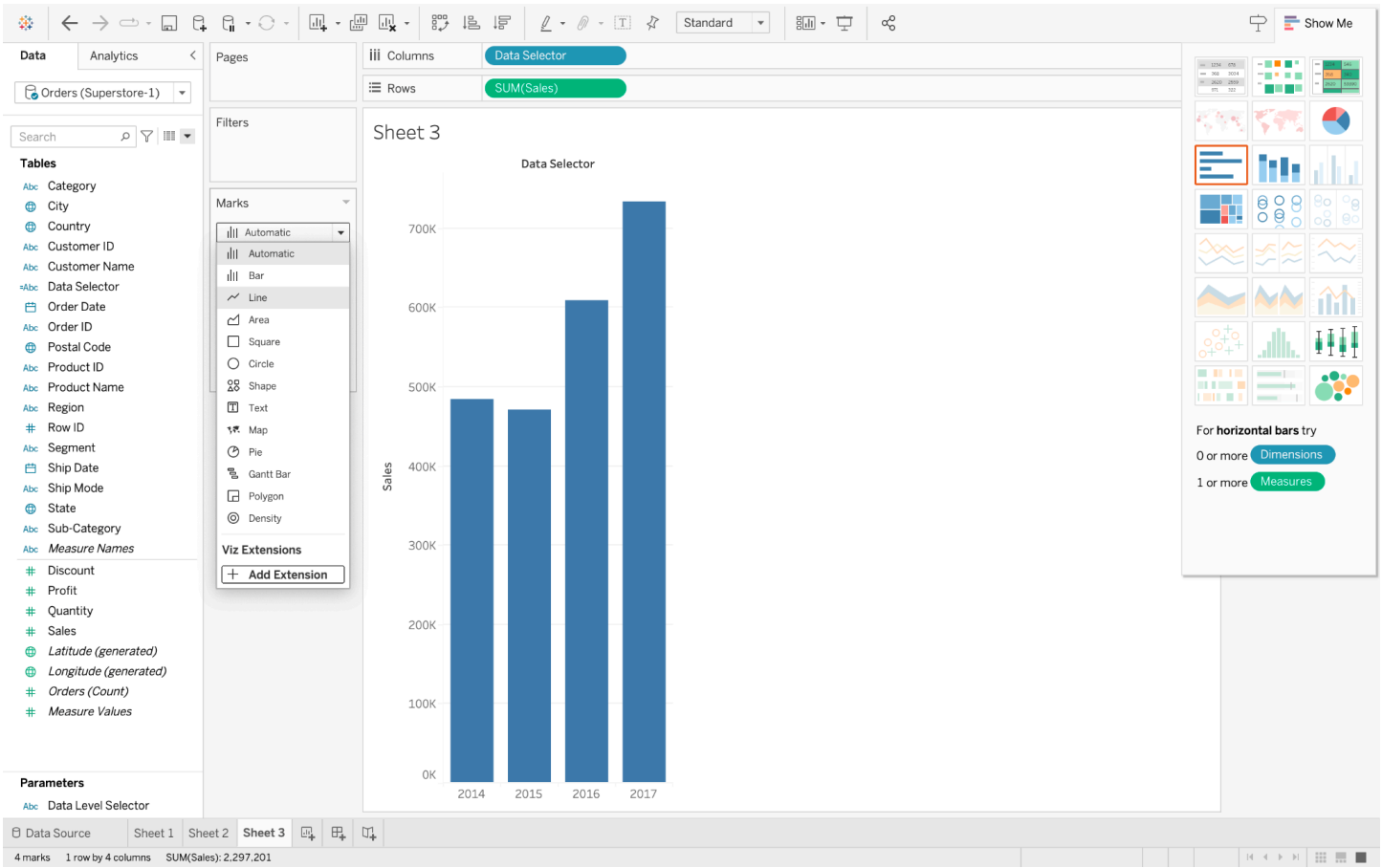


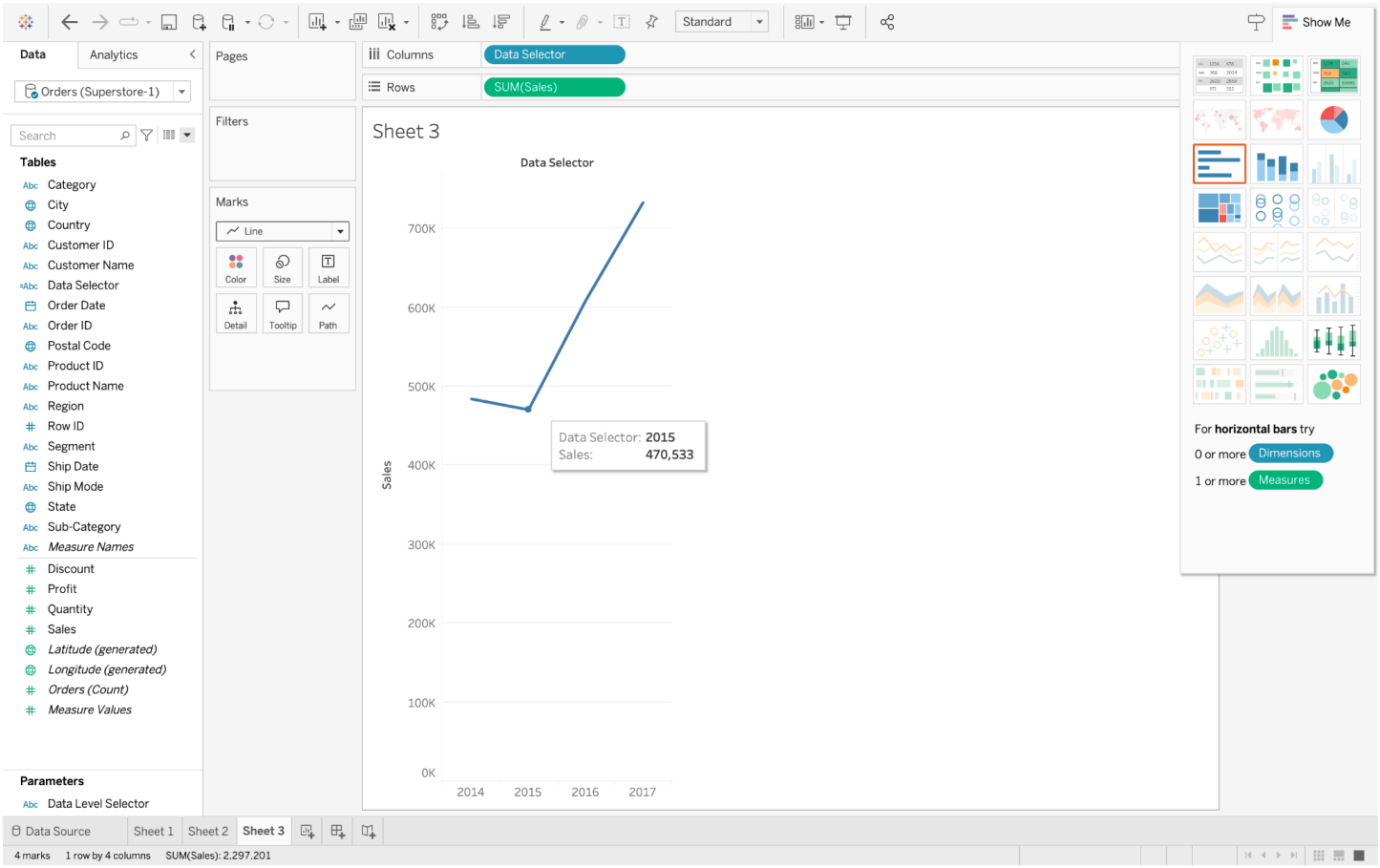
Step 6:

Creating the visualization to display the sales data by keeping the Data Selector on the columns and sales on the rows.



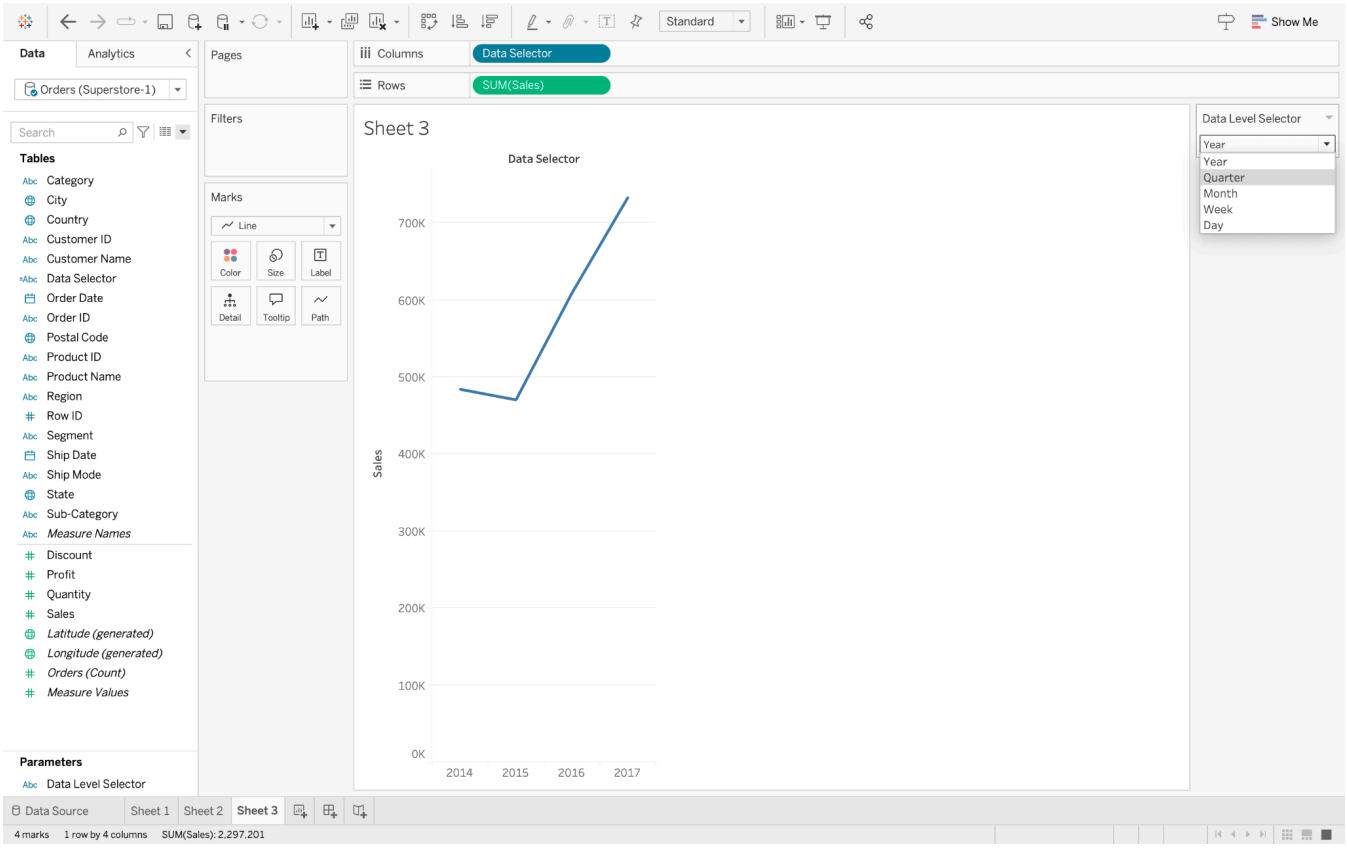
Step 7:
Changing the mark type to “LINE”. The visualization will be transformed to a line chart and then we can visualize the sales over the selected date intervals.

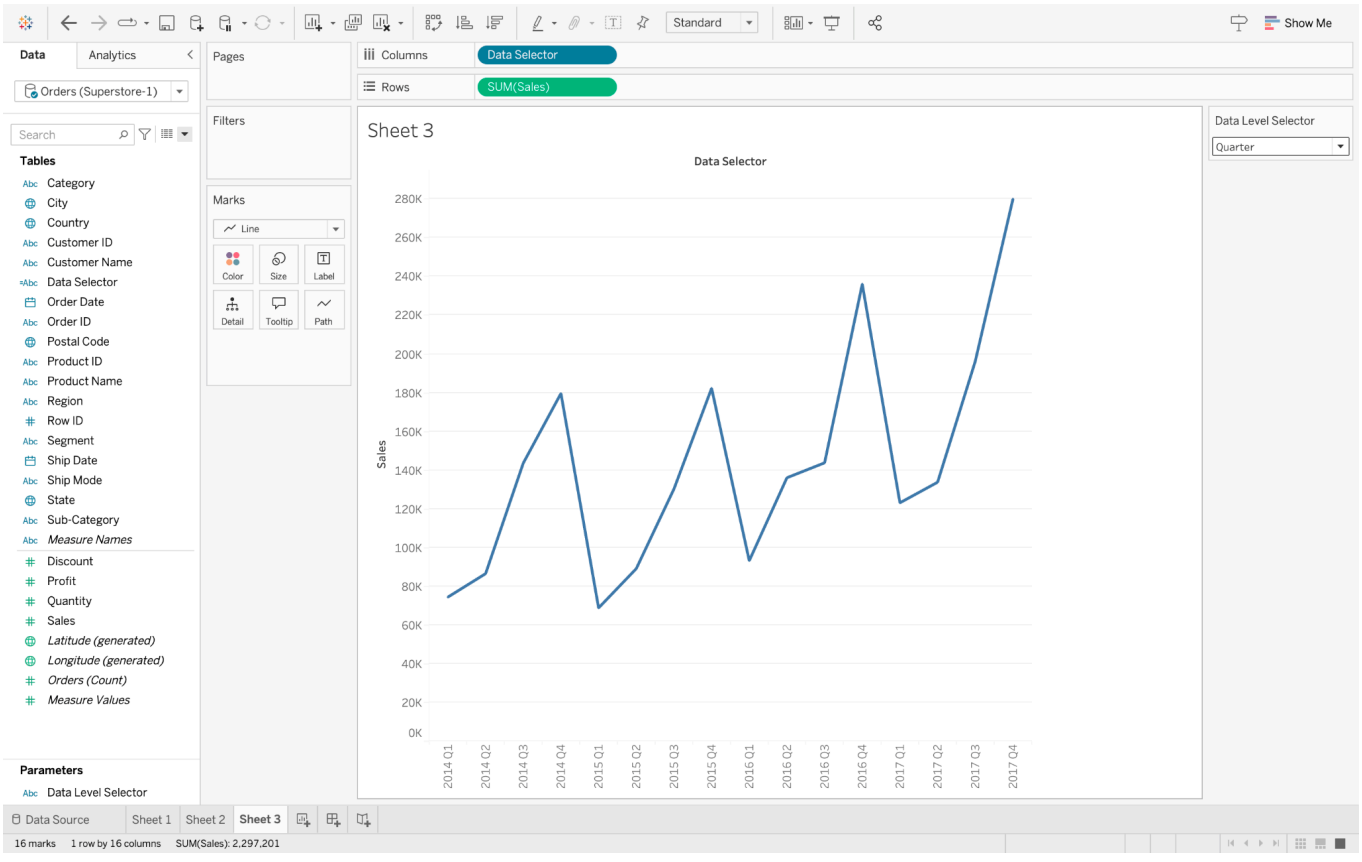

Standard
Show Me
Data
Analytics
Orders (Superstore-1)
Search
Tables
Abc Category
City
Country
Abc Customer ID
Abc Customer Name
Abc Data Selector
Order Date
Abc Order ID
Postal Code
Abc Product ID
Abc Product Name
Abc Region
Row ID
Abc Segment
Ship Date
Abc Ship Mode
State
Abc Sub-Category
Abc Measure Names
Discount
Profit
Quantity
Sales
Latitude (generated)
Longitude (generated)
Orders (Count)
Measure Values
Parameters
Abc Data Level Selector
Pages
Filters
Marks
Automatic
Automatic
Bar
Line
Area
Square
Circle
Shape
Text
Map
Pie
Gantt Bar
Polygon
Density
Viz Extensions
Add Extension
Columns
Data Selector
Rows
SUM(Sales)
Sheet 3
Data Selector
Sales
700K
600K
500K
400K
300K
200K
100K
0K
2014
2015
2016
2017
For horizontal bars try
0 or more Dimensions
1 or more Measures
Data Source
Sheet 1
Sheet 2
Sheet 3
4 marks
1 row by 4 columns
SUM(Sales): 2,297,201


Standard
Show Me
Data
Analytics
Orders (Superstore-1)
Search
Tables
Abc Category
City
Country
Abc Customer ID
Abc Customer Name
Abc Data Selector
Order Date
Abc Order ID
Postal Code
Abc Product ID
Abc Product Name
Abc Region
Row ID
Abc Segment
Ship Date
Abc Ship Mode
State
Abc Sub-Category
Abc Measure Names
Discount
Profit
Quantity
Sales
Latitude (generated)
Longitude (generated)
Orders (Count)
Measure Values
Parameters
Abc Data Level Selector
Pages
Filters
Marks
Line
Color
Size
Label
Detail
Tooltip
Path
Columns
Data Selector
Rows
SUM(Sales)
Sheet 3
Data Selector
Sales
700K
600K
500K
400K
300K
200K
100K
0K
2014
2015
2016
2017
Data Selector: 2015
Sales: 470,533
For horizontal bars try
0 or more Dimensions
1 or more Measures
Data Source
Sheet 1
Sheet 2
Sheet 3
4 marks
1 row by 4 columns
SUM(Sales): 2,297,201

Step 8:

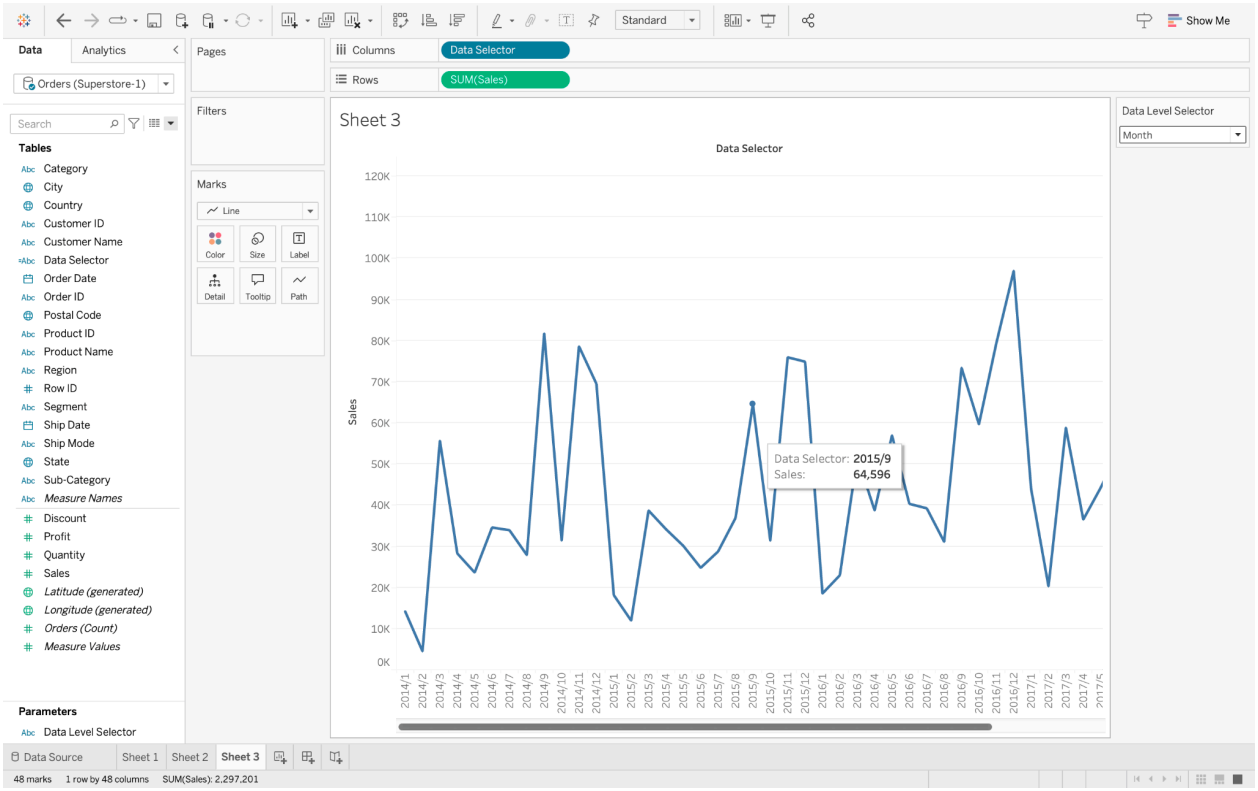
Changing the Date Level Selector parameter to Quarter.This will display the sales figures within the selected quarters in the line chart.





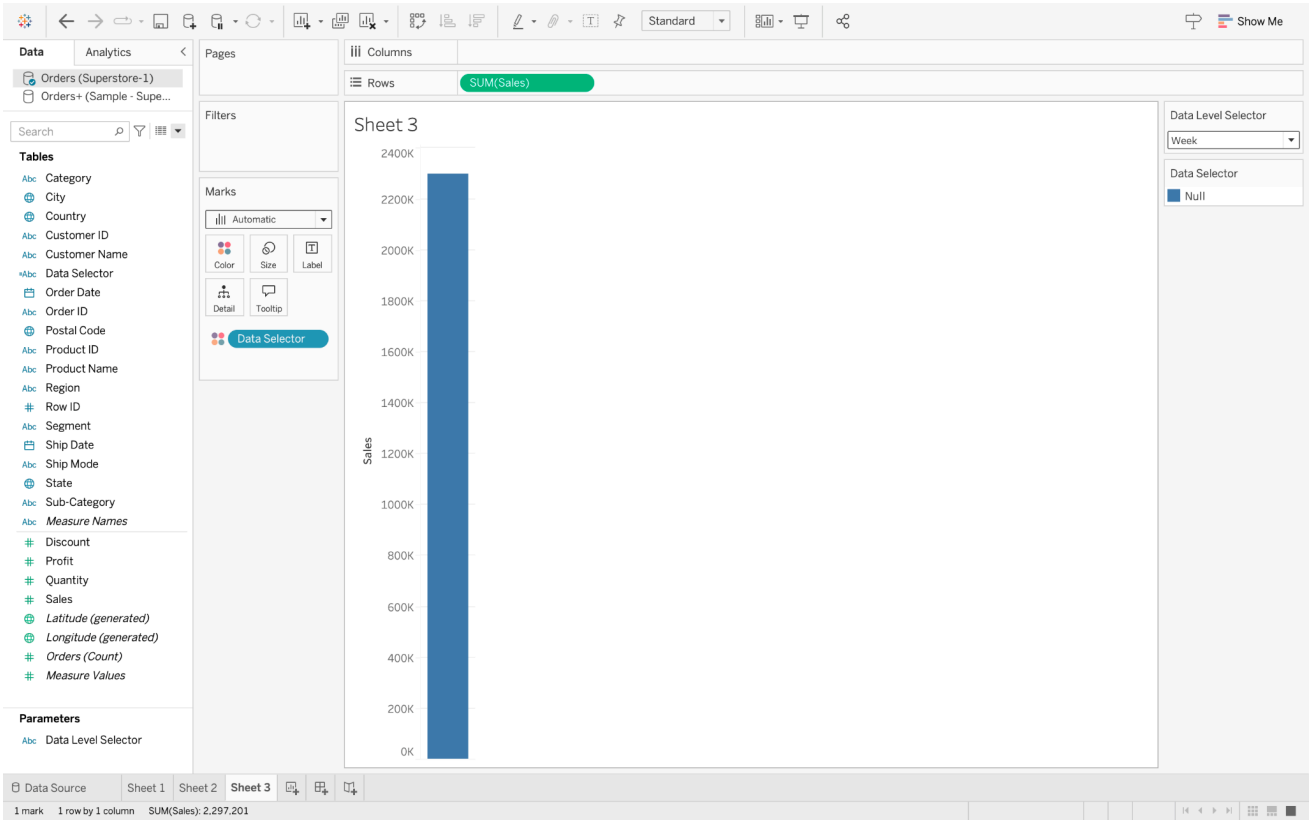
Step 9:

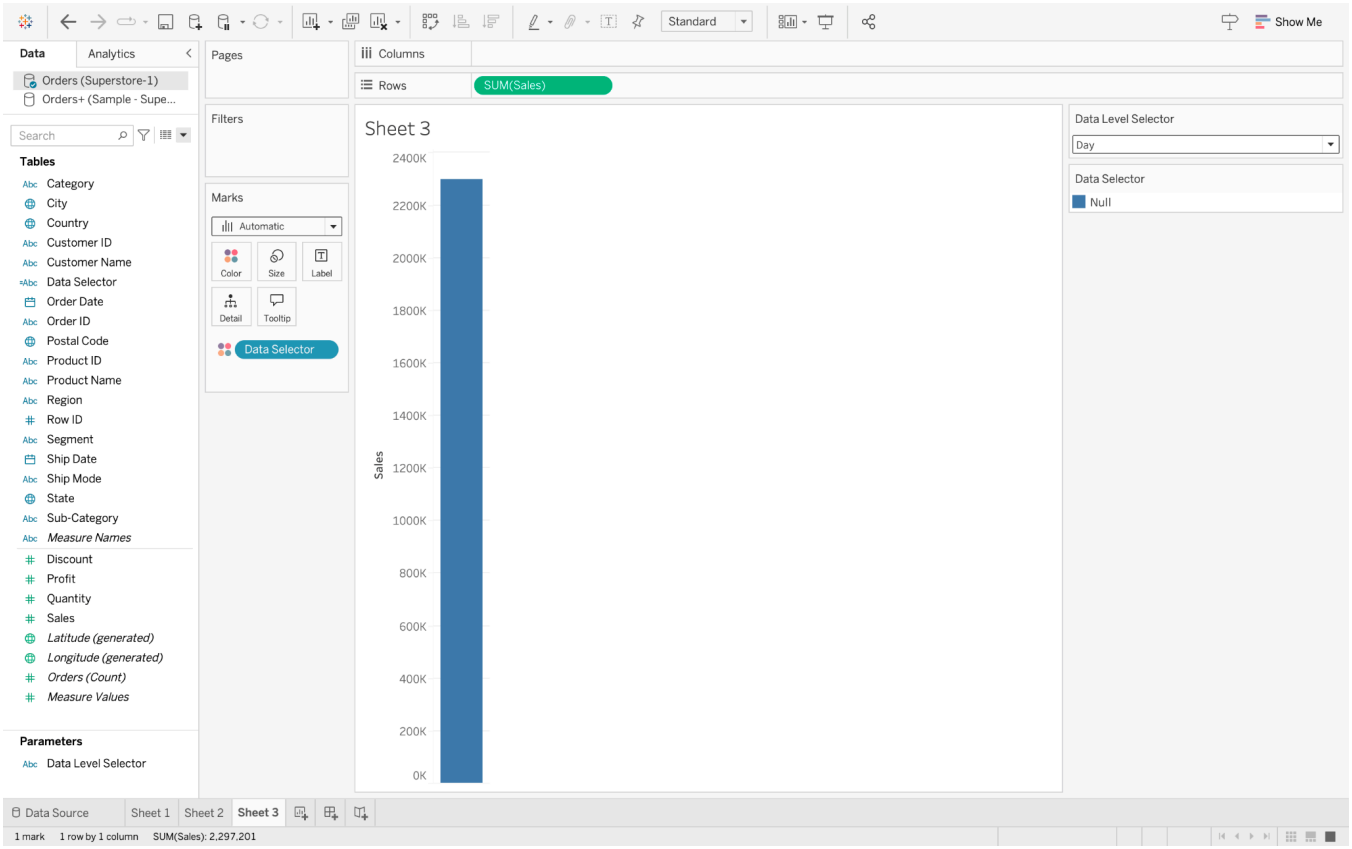
Changing the Date Level Selector parameter to Month.This will display the sales figures within the selected Month and it gives a more detailed analysis in the line chart.



Step 10:

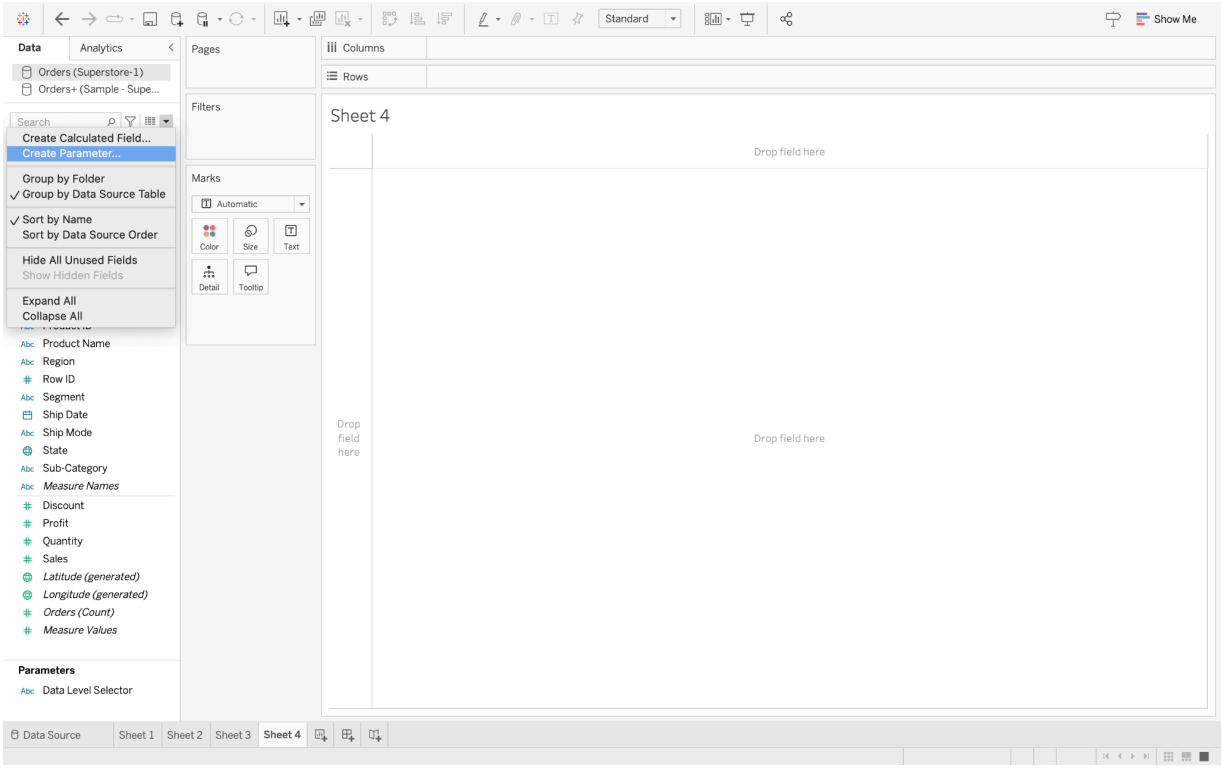
Changing the Date Level Selector parameter to week and Day.This will display the sales figures within the selected week and Day in the line chart.

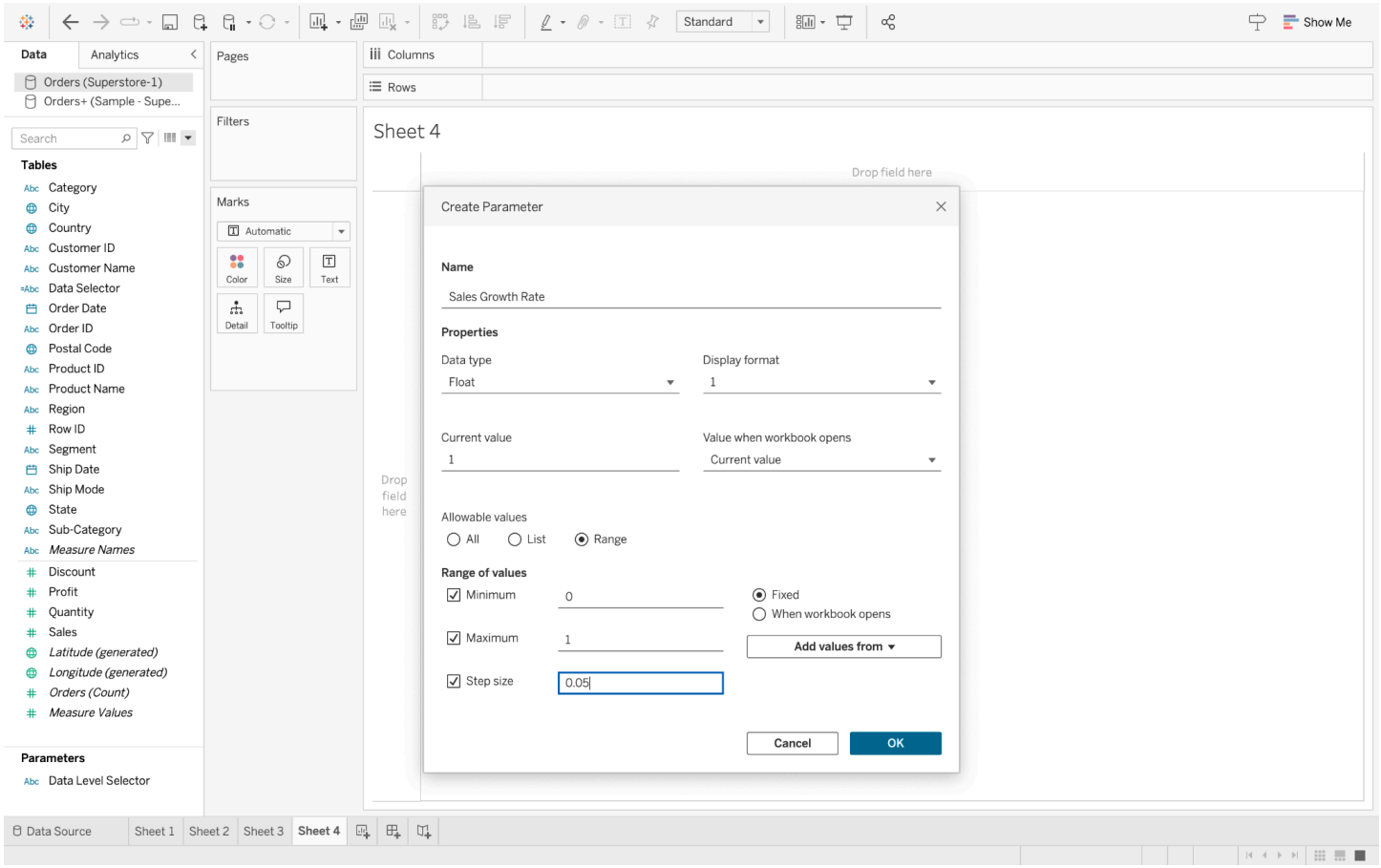




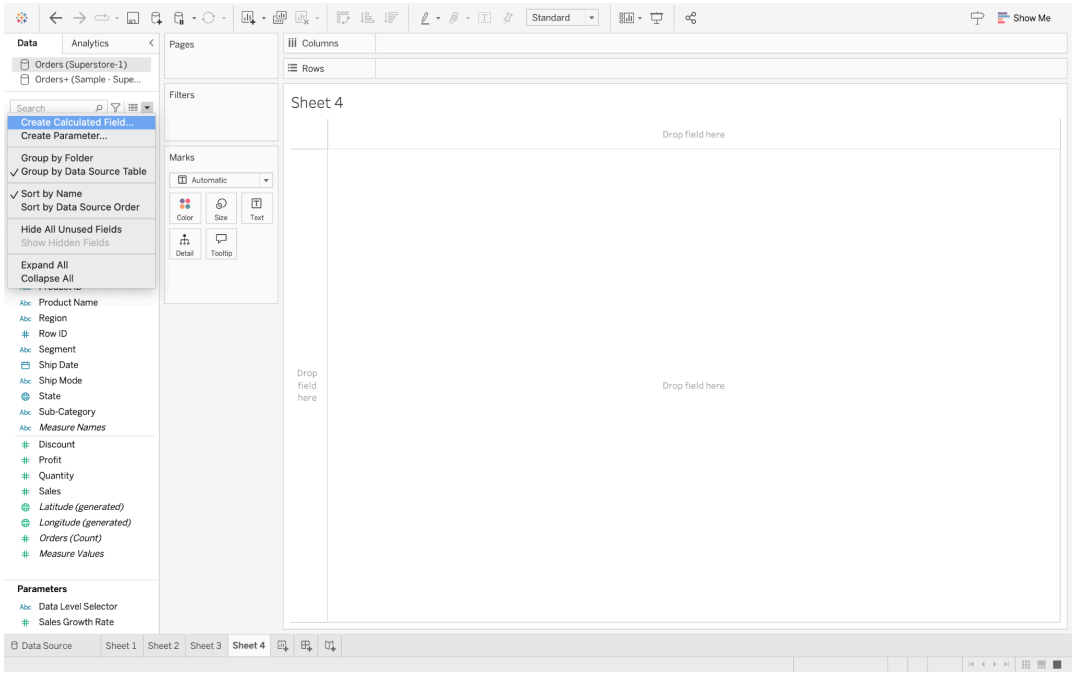
Question 2

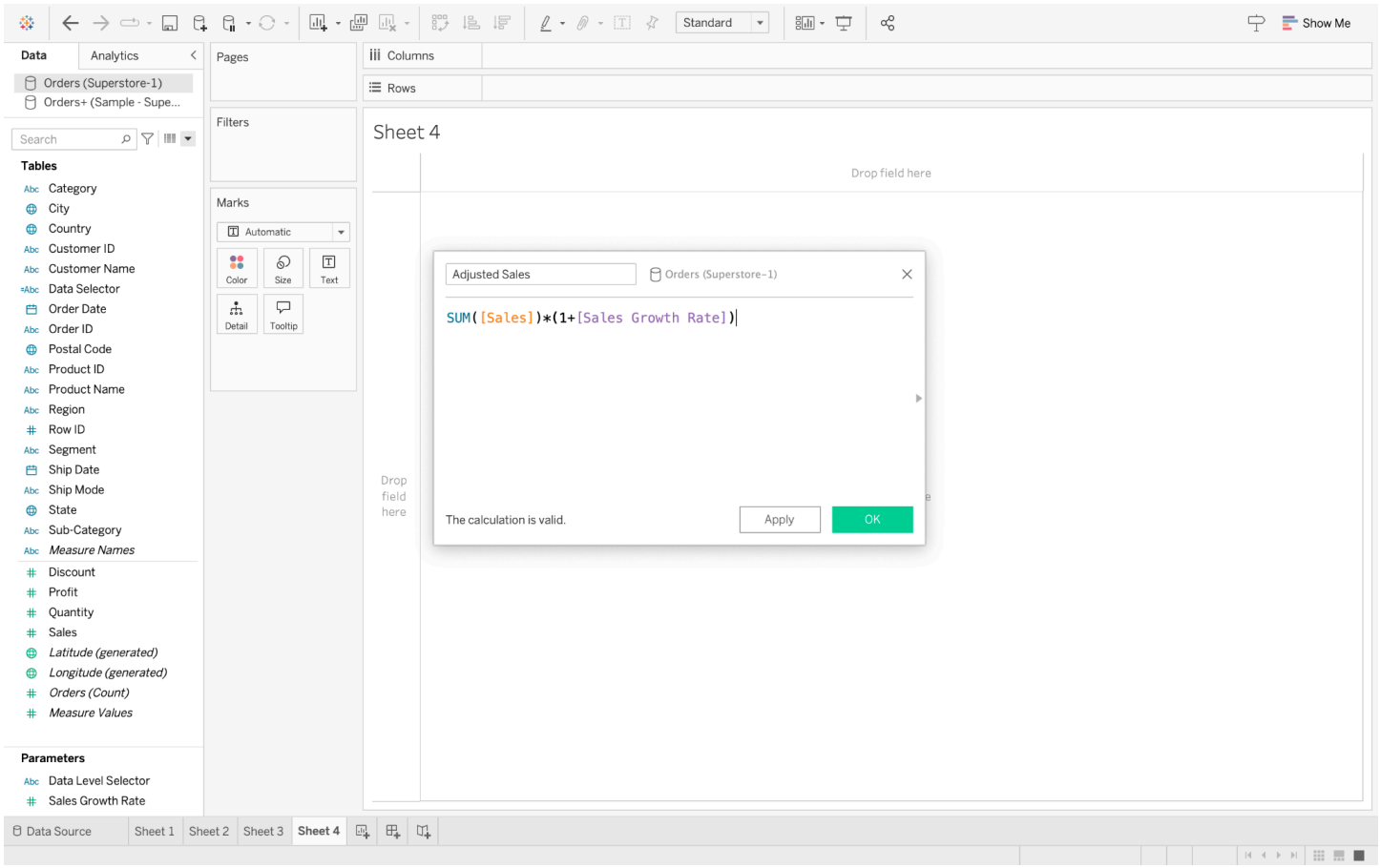
1) Create a parameter named `Sales Growth Rate`, set the Data Type to Float, and set the range from 0 to 1 with a step size of 0.05



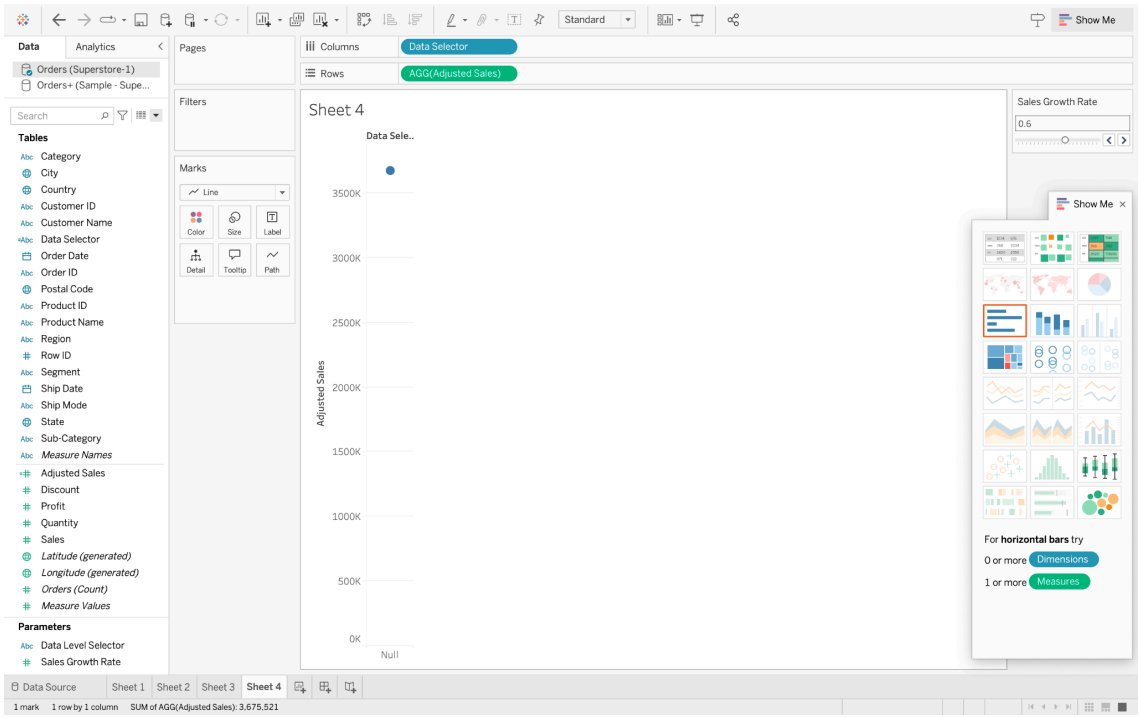


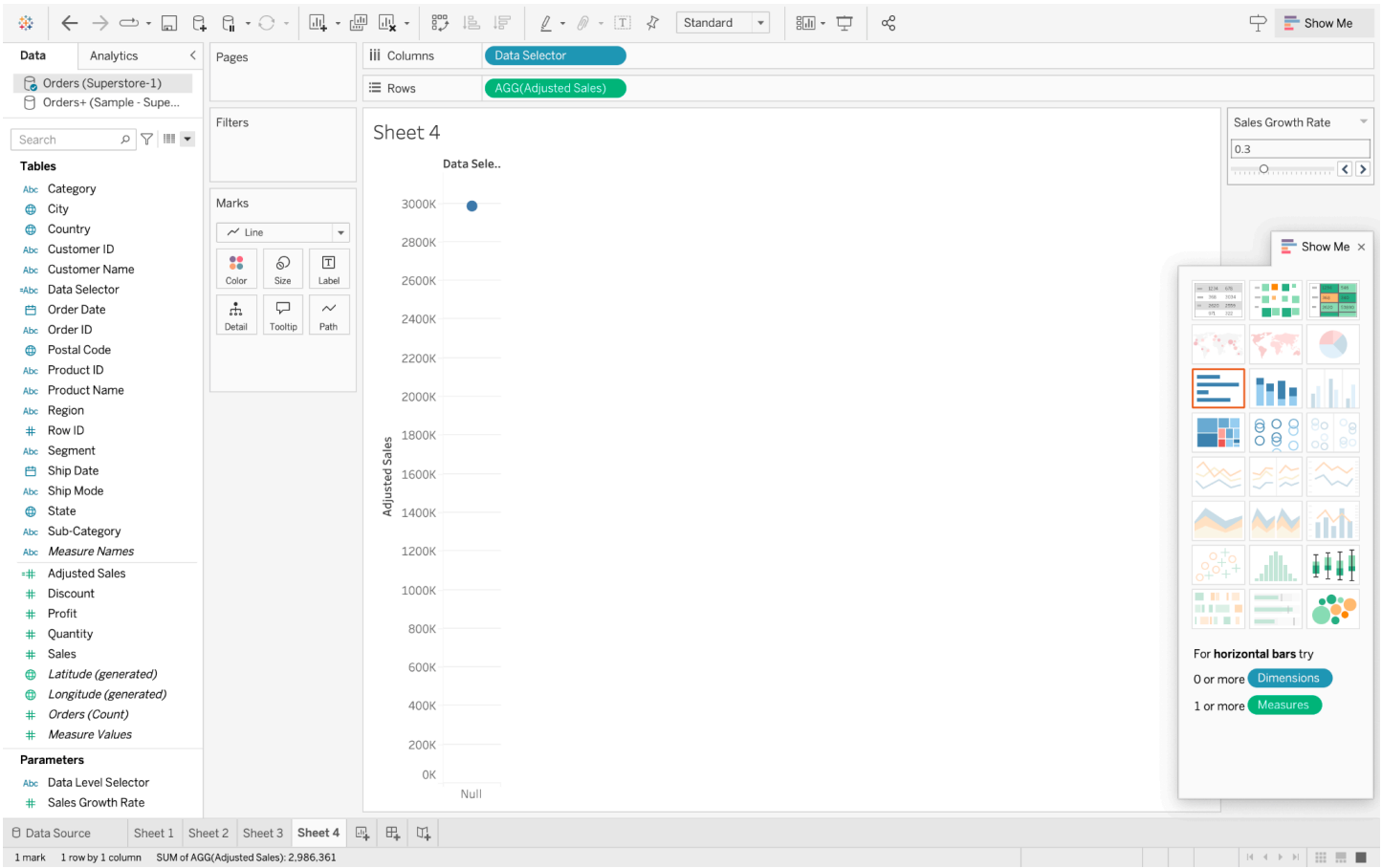
2)Create a new calculated field named `Adjusted Sales` using the formula: SUM([Sales]) * (1 + [Sales Growth Rate])

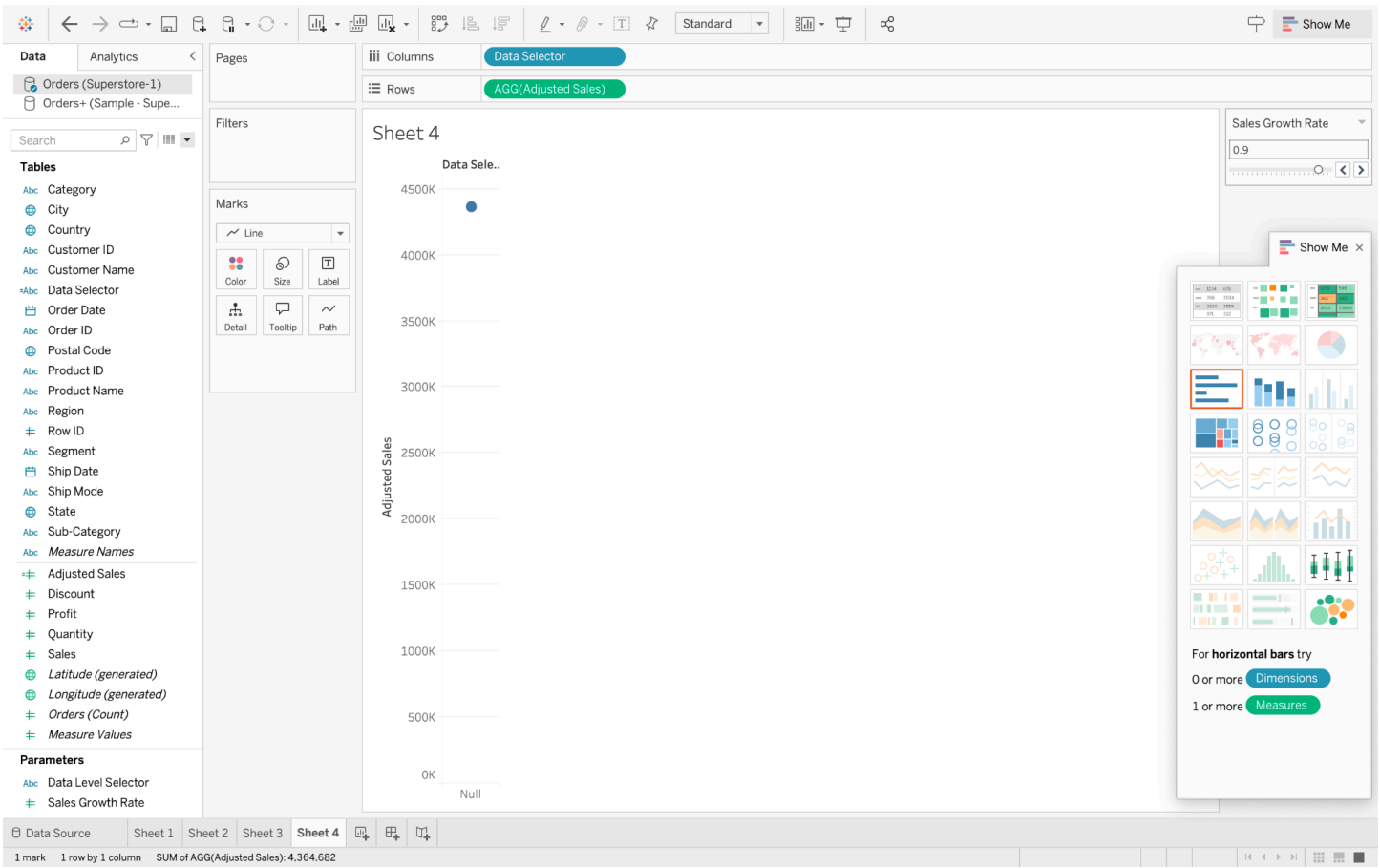




3) Using the `Adjusted Sales` in the line chart to compare sales with different growth rates by modifying the `Sales Growth Rate` parameter.




Standard
Show Me
Data
Analytics
Orders (Superstore-1)
Orders+ (Sample - Supe...
Search
Tables
Abc Category
City
Country
Abc Customer ID
Abc Customer Name
Abc Data Selector
Order Date
Abc Order ID
Postal Code
Abc Product ID
Abc Product Name
Abc Region
Row ID
Abc Segment
Ship Date
Abc Ship Mode
State
Abc Sub-Category
Abc Measure Names
Adjusted Sales
Discount
Profit
Quantity
Sales
Latitude (generated)
Longitude (generated)
Orders (Count)
Measure Values
Parameters
Abc Data Level Selector
Sales Growth Rate
Pages
Filters
Marks
Line
Color
Size
Label
Detail
Tooltip
Path
Columns
Data Selector
Rows
AGG(Adjusted Sales)
Sheet 4
Data Sele..
Adjusted Sales
3000K
2800K
2600K
2400K
2200K
2000K
1800K
1600K
1400K
1200K
1000K
800K
600K
400K
200K
0K
Null
Sales Growth Rate
0.3
Show Me
For horizontal bars try
0 or more Dimensions
1 or more Measures
Data Source
Sheet 1
Sheet 2
Sheet 3
Sheet 4
1 mark
1 row by 1 column
SUM of AGG(Adjusted Sales): 2,986,361


Standard
Show Me
Data
Analytics
Orders (Superstore-1)
Orders+ (Sample - Supe...
Search
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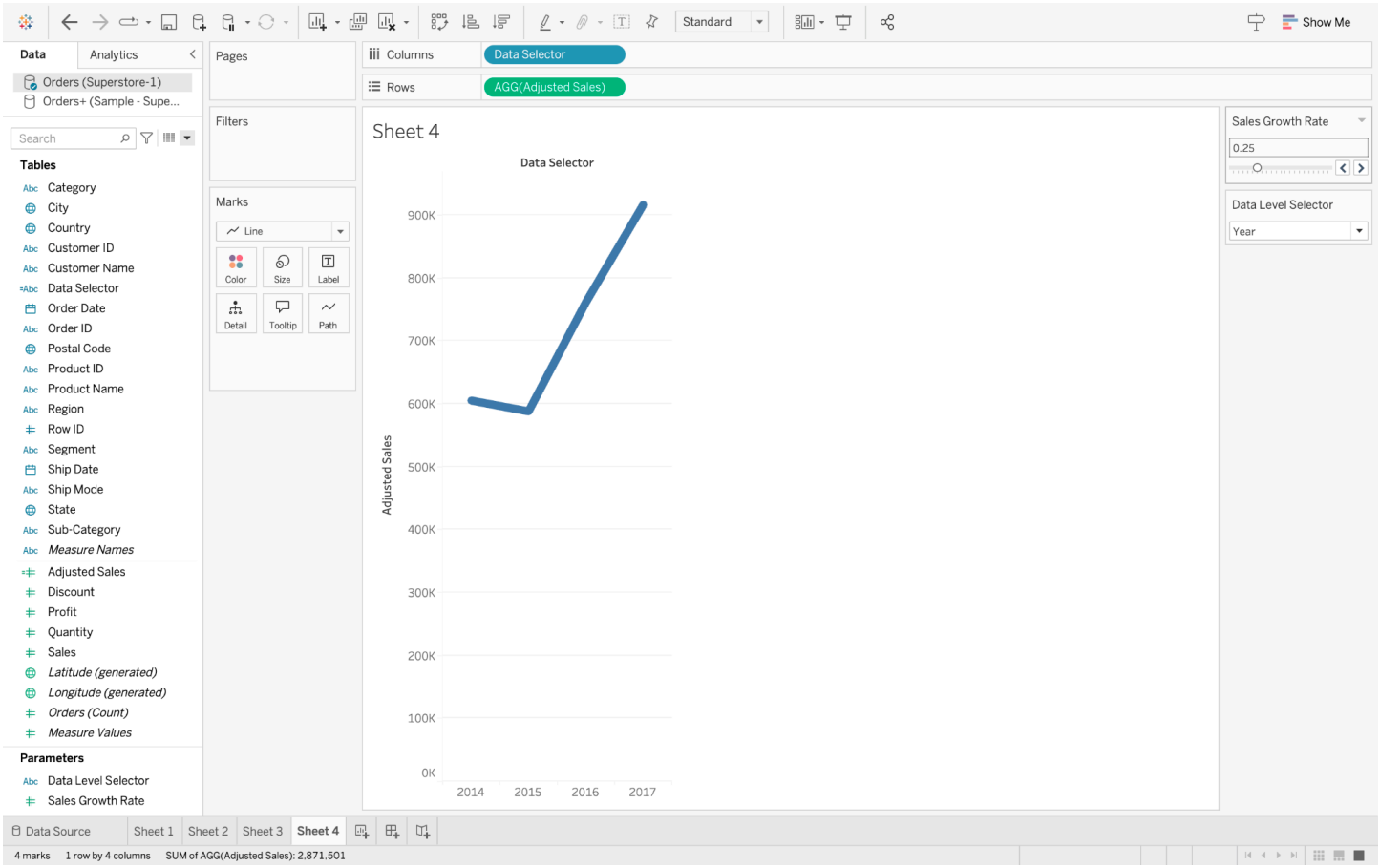
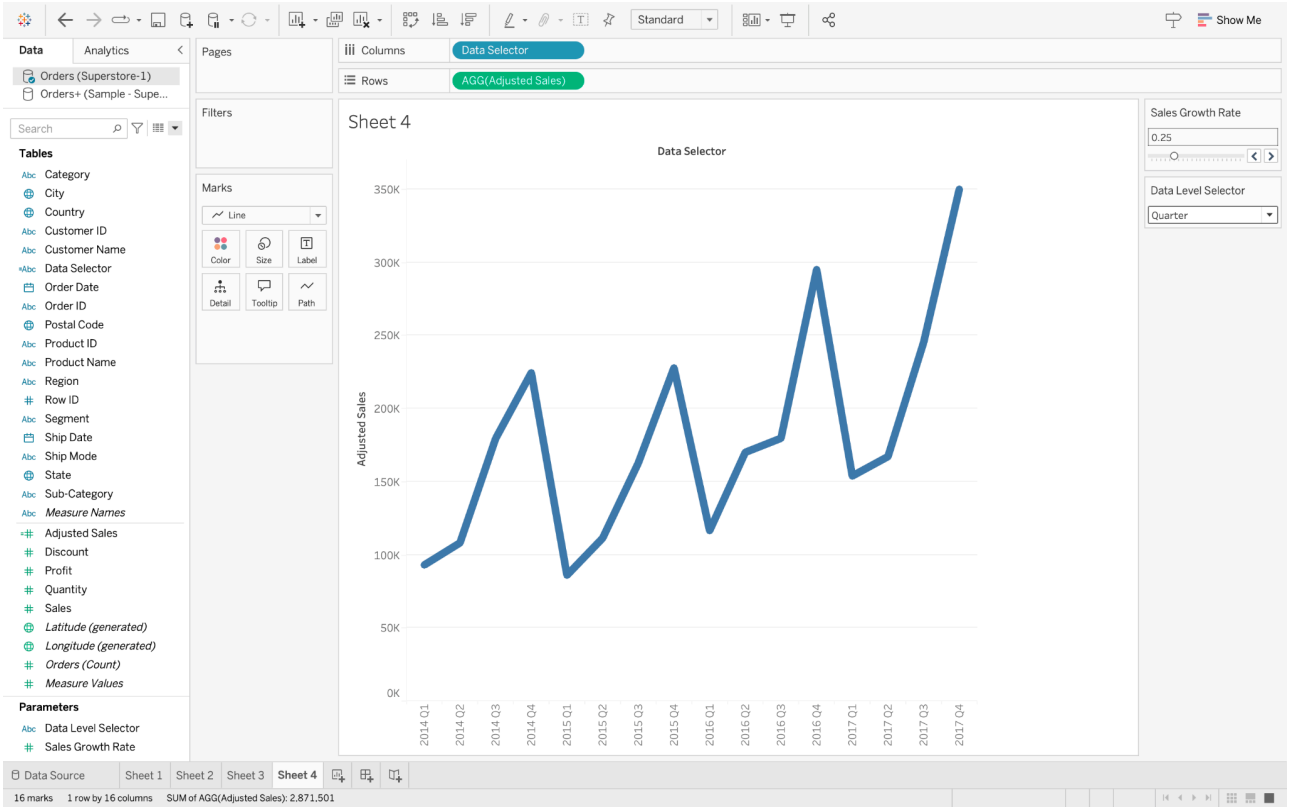
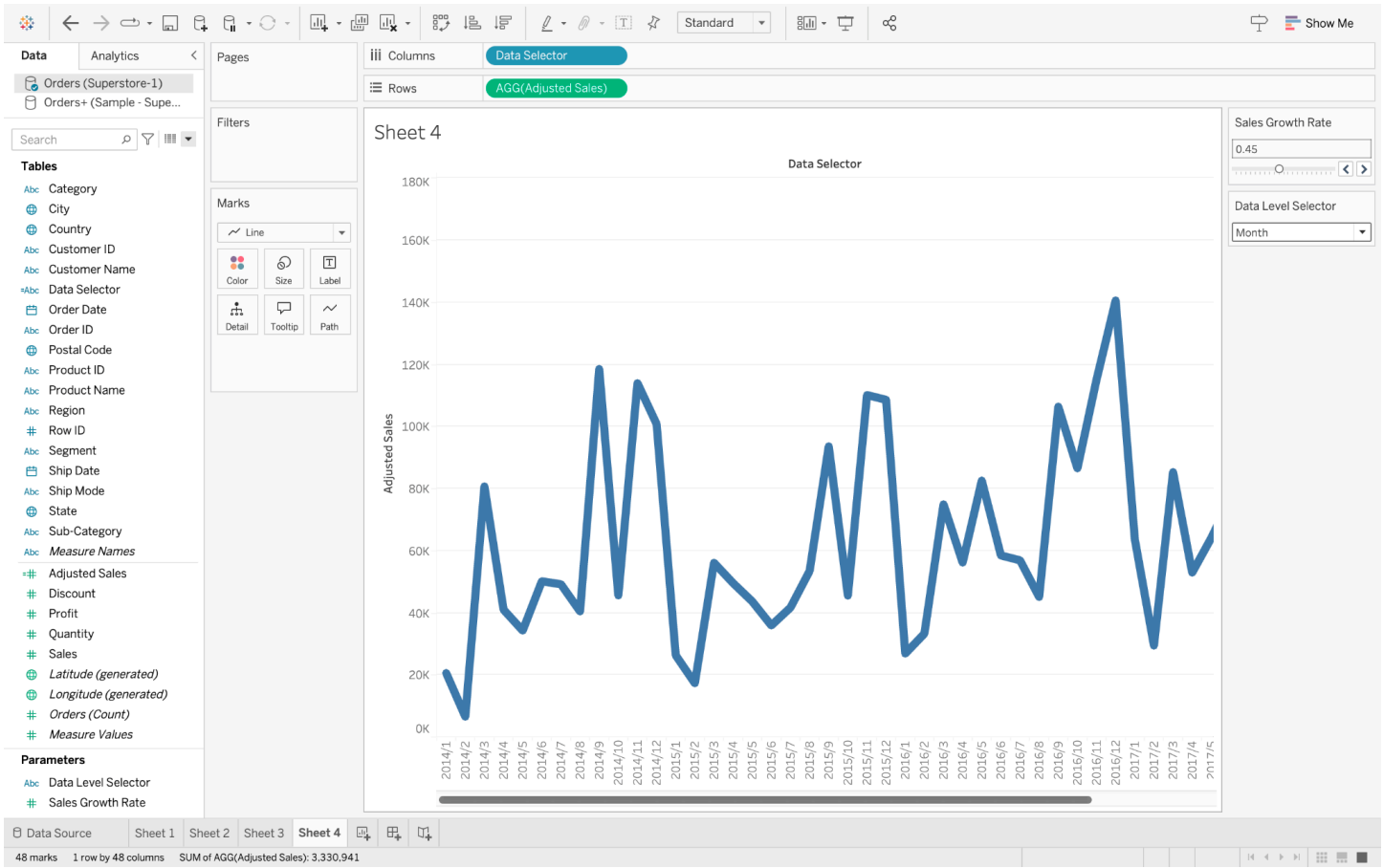
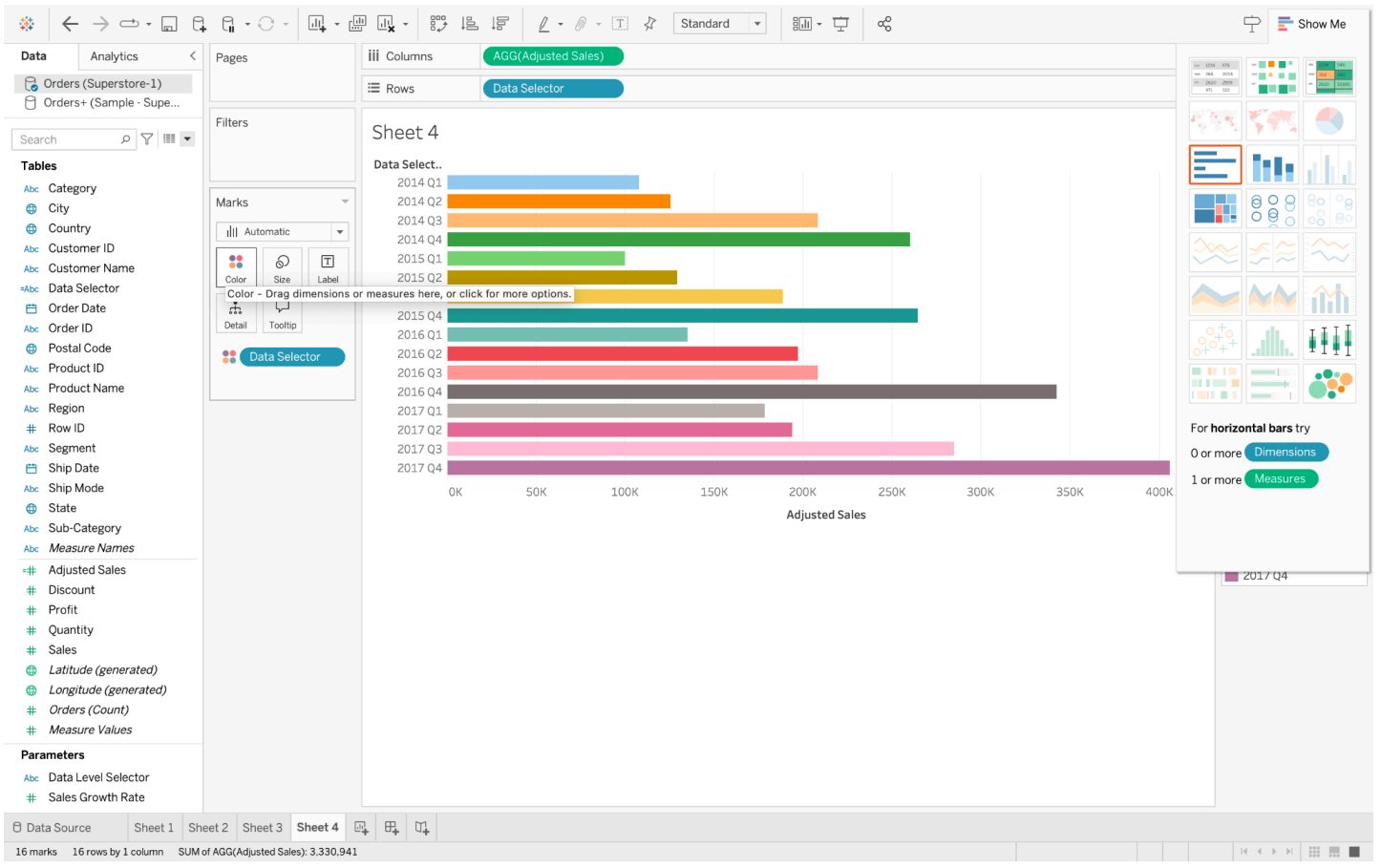
Abc Category
City
Country
Abc Customer ID
Abc Customer Name
Abc Data Selector
Order Date
Abc Order ID
Postal Code
Abc Product ID
Abc Product Name
Abc Region
Row ID
Abc Segment
Ship Date
Abc Ship Mode
State
Abc Sub-Category
Abc Measure Names
Adjusted Sales
Discount
Profit
Quantity
Sales
Latitude (generated)
Longitude (generated)
Orders (Count)
Measure Values
Parameters
Abc Data Level Selector
Sales Growth Rate
Pages
Filters
Marks
Line
Color
Size
Label
Detail
Tooltip
Path
Columns
Data Selector
Rows
AGG(Adjusted Sales)
Sheet 4
Data Sele..
Adjusted Sales
4500K
4000K
3500K
3000K
2500K
2000K
1500K
1000K
500K
0K
Null
Sales Growth Rate
0.9
Show Me
For horizontal bars try
0 or more Dimensions
1 or more Measures
Data Source
Sheet 1
Sheet 2
Sheet 3
Sheet 4
1 mark
1 row by 1 column
SUM of AGG(Adjusted Sales): 4,364,682

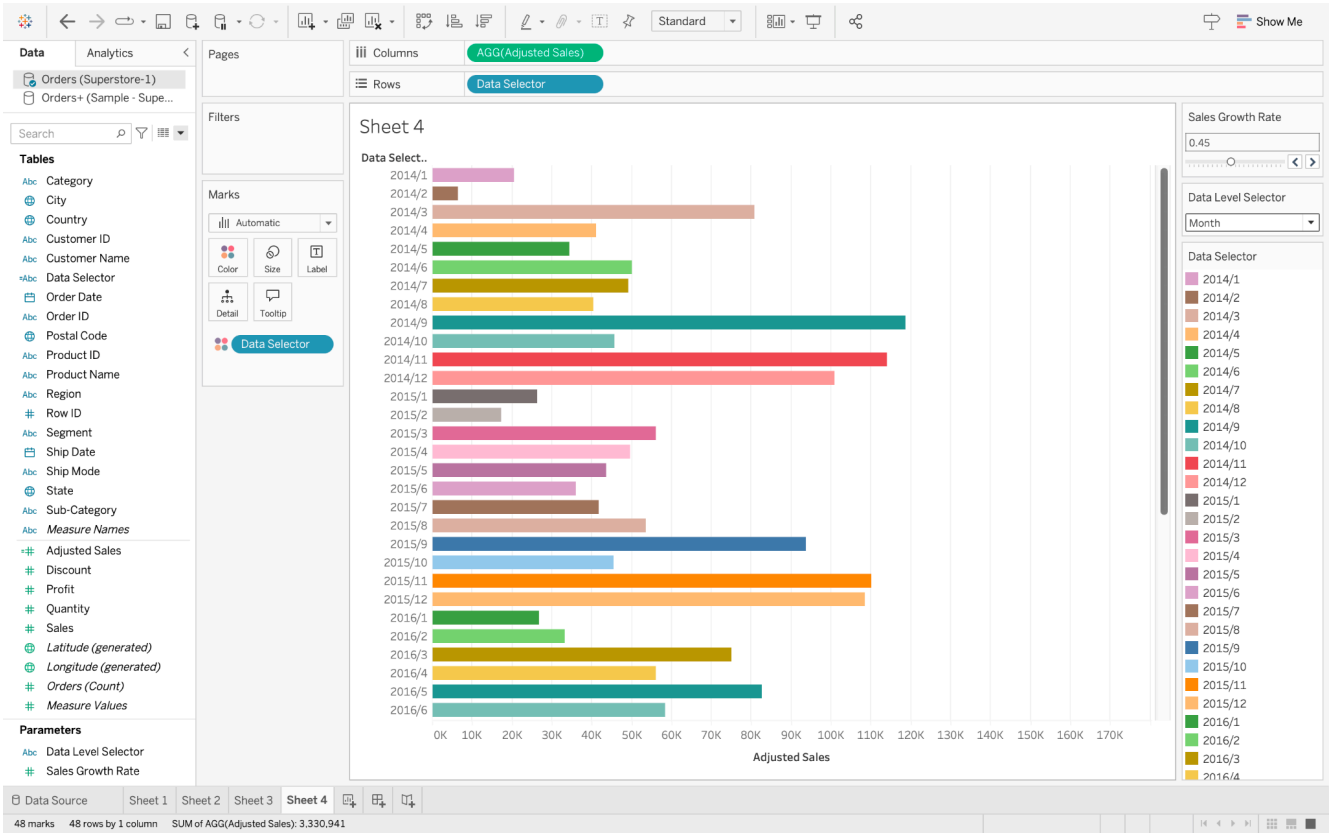
4) Switching between the Year, Quarter, Month using the Data Level Selector parameter.






Data
Analytics
Orders (Superstore-1)
Orders+ (Sample - Supe...
Search
Tables
Category
City
Country
Customer ID
Customer Name
Data Selector
Order Date
Order ID
Postal Code
Product ID
Product Name
Region
Row ID
Segment
Ship Date
Ship Mode
State
Sub-Category
Measure Names
Adjusted Sales
Discount
Profit
Quantity
Sales
Latitude (generated)
Longitude (generated)
Orders (Count)
Measure Values
Parameters
Data Level Selector
Sales Growth Rate
Pages
Filters
Marks
Line
Color
Size
Label
Detail
Tooltip
Path
Columns
Data Selector
Rows
AGG(Adjusted Sales)
Standard
Show Me
Sheet 4
Data Selector
Adjusted Sales
180K
160K
140K
120K
100K
80K
60K
40K
20K
0K
Sales Growth Rate
0.45
Data Level Selector
Month
Data Source
Sheet 1
Sheet 2
Sheet 3
Sheet 4
48 marks
1 row by 48 columns
SUM of AGG(Adjusted Sales): 3,330,941


Data
Analytics
Orders (Superstore-1)
Orders+ (Sample - Supe...
Search
Tables
Category
City
Country
Customer ID
Customer Name
Data Selector
Order Date
Order ID
Postal Code
Product ID
Product Name
Region
Row ID
Segment
Ship Date
Ship Mode
State
Sub-Category
Measure Names
Adjusted Sales
Discount
Profit
Quantity
Sales
Latitude (generated)
Longitude (generated)
Orders (Count)
Measure Values
Parameters
Data Level Selector
Sales Growth Rate
Pages
Filters
Marks
Automatic
Color
Size
Label
Detail
Tooltip
Color - Drag dimensions or measures here, or click for more options.
Data Selector
Columns
AGG(Adjusted Sales)
Rows
Data Selector
Standard
Show Me
Sheet 4
Data Select..
2014 Q1
2014 Q2
2014 Q3
2014 Q4
2015 Q1
2015 Q2
2015 Q3
2015 Q4
2016 Q1
2016 Q2
2016 Q3
2016 Q4
2017 Q1
2017 Q2
2017 Q3
2017 Q4
0K
50K
100K
150K
200K
250K
300K
350K
400K
Adjusted Sales
For horizontal bars try
0 or more Dimensions
1 or more Measures
Data Source
Sheet 1
Sheet 2
Sheet 3
Sheet 4
16 marks
16 rows by 1 column
SUM of AGG(Adjusted Sales): 3,330,941

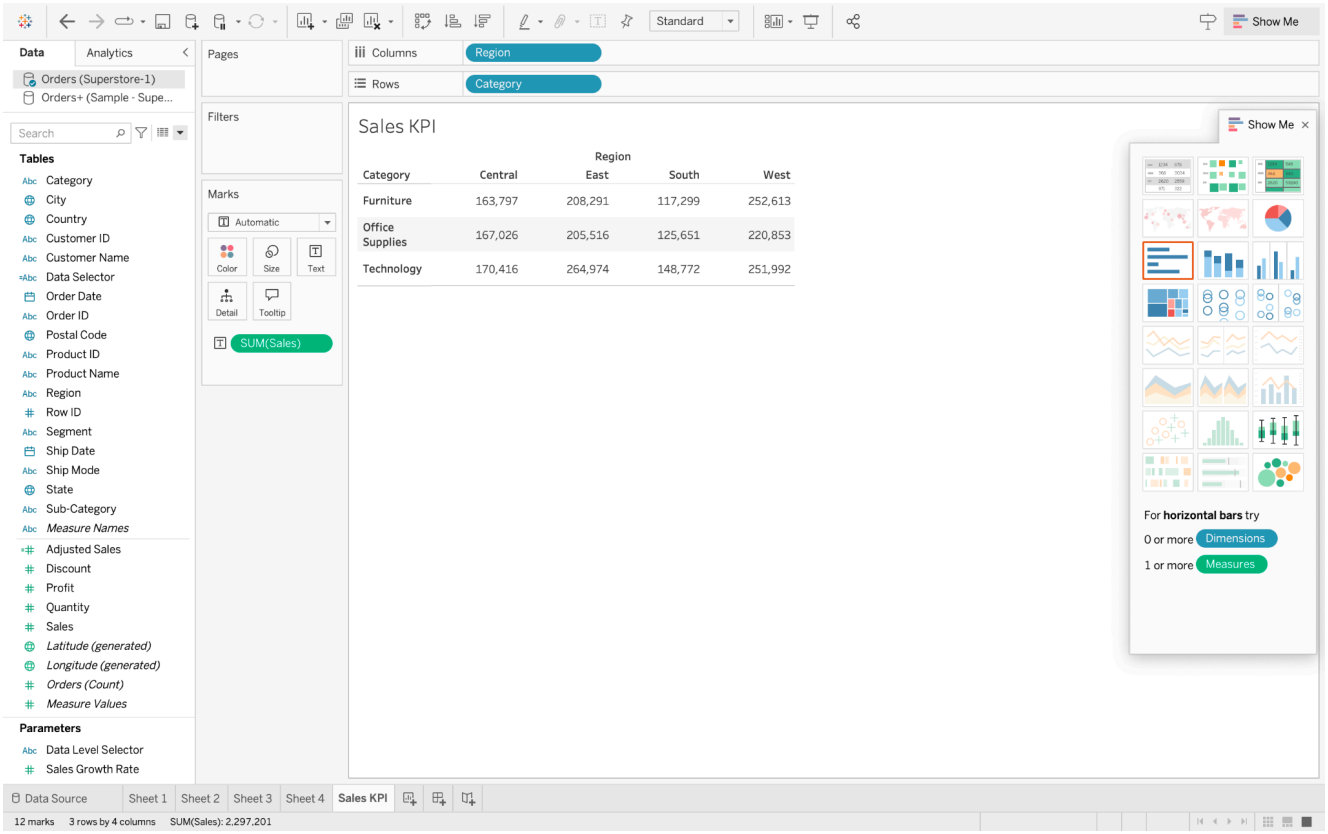


5) When designs are implemented, according to the defined jurisdiction, it will create free space in respect to the different datatypes in the databases used- the most pertinent ones and leave others remaining as is although appending them is not mandatory. Let us consider some of the popular applications of Joins.

- Inner Join: Uses each feature from two tables (like for example Orders and Products, Tables are referring to tables) and merges them based on their intersection/ two common columns, these are by pillars and rows. They merge all the records from both tables but only based on what both tables contain. Consider there to be a big 100 records file and two columns. Cat and Dog columns, The Dog column represents things that are outside both sides of the occupies of the Dog as represented by the 100th row and the diagram below (15, 10).
- Left Join: In this type of join, every record from the live is picked, and all the corresponding records are also joined to it from the table on the right.
- Right Join: In this kind of join, it is very easy to get every record from the plane as well as the health most appropriate record to the requested one.
- Full Outer Join: When we sum up all the records from the two tables together, we include all of them, irrespective of whether there is a match or not a match. All the elements are not corner valid, meaning that join can work even if individual attribute variables of tables have missing values.

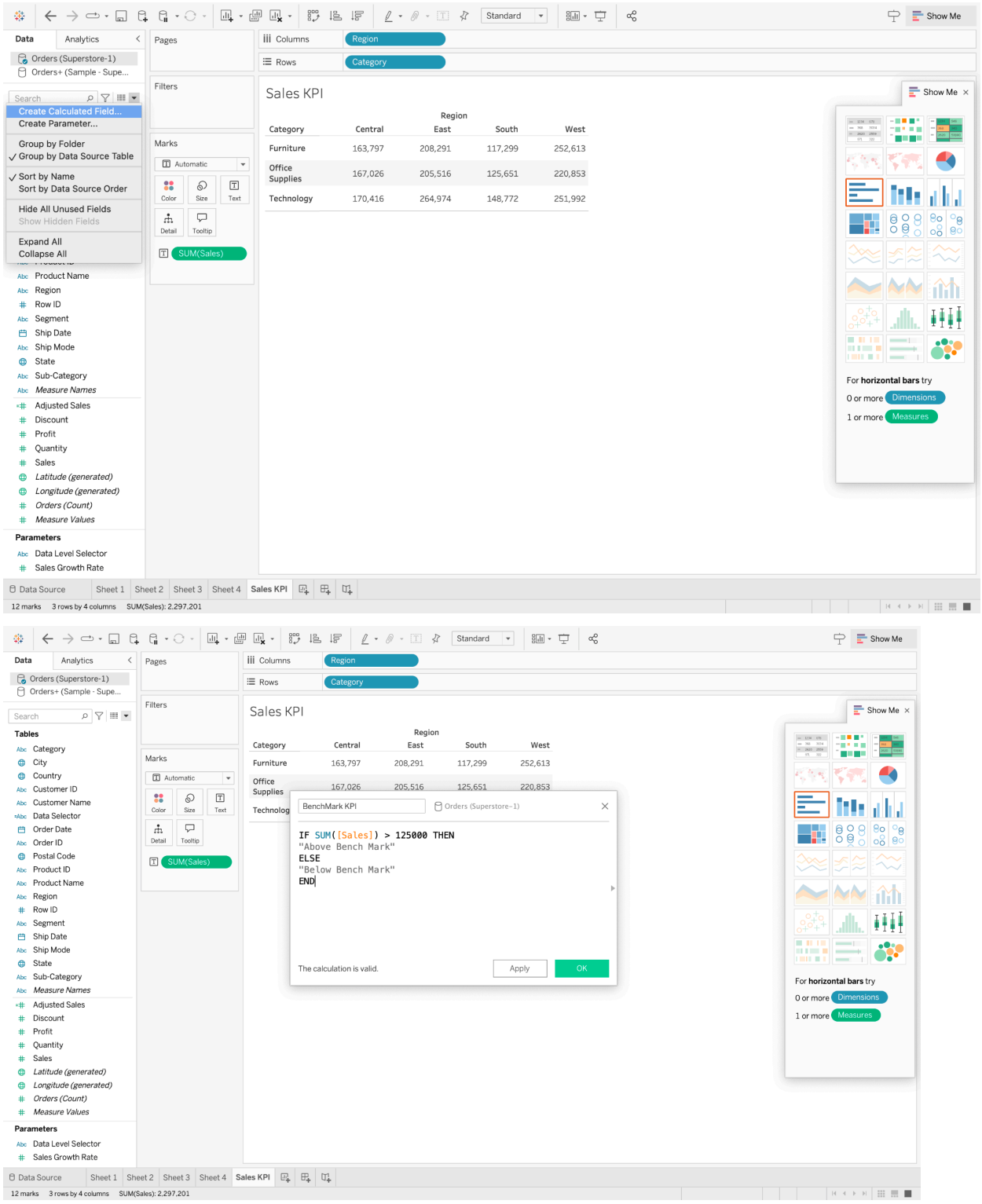
TASK - 3

Step 1: Using the Superstore dataset and creating a new worksheet named Sales KPI and placing the categories in rows shelf and region in column and sales in text shelf.

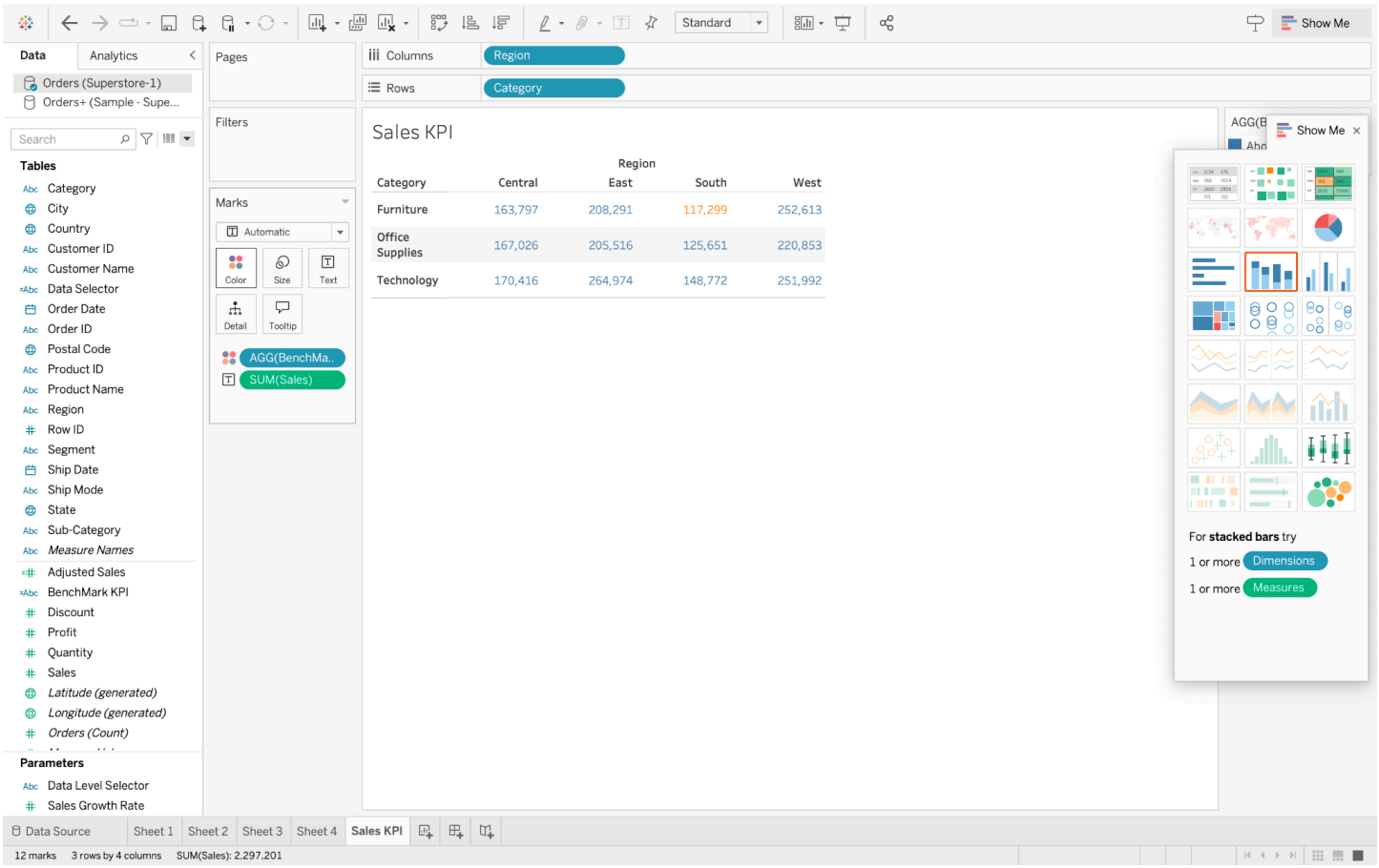


Step 2: Creating the calculated field and named as BenchMark KPI and giving the below function and clicking ok.

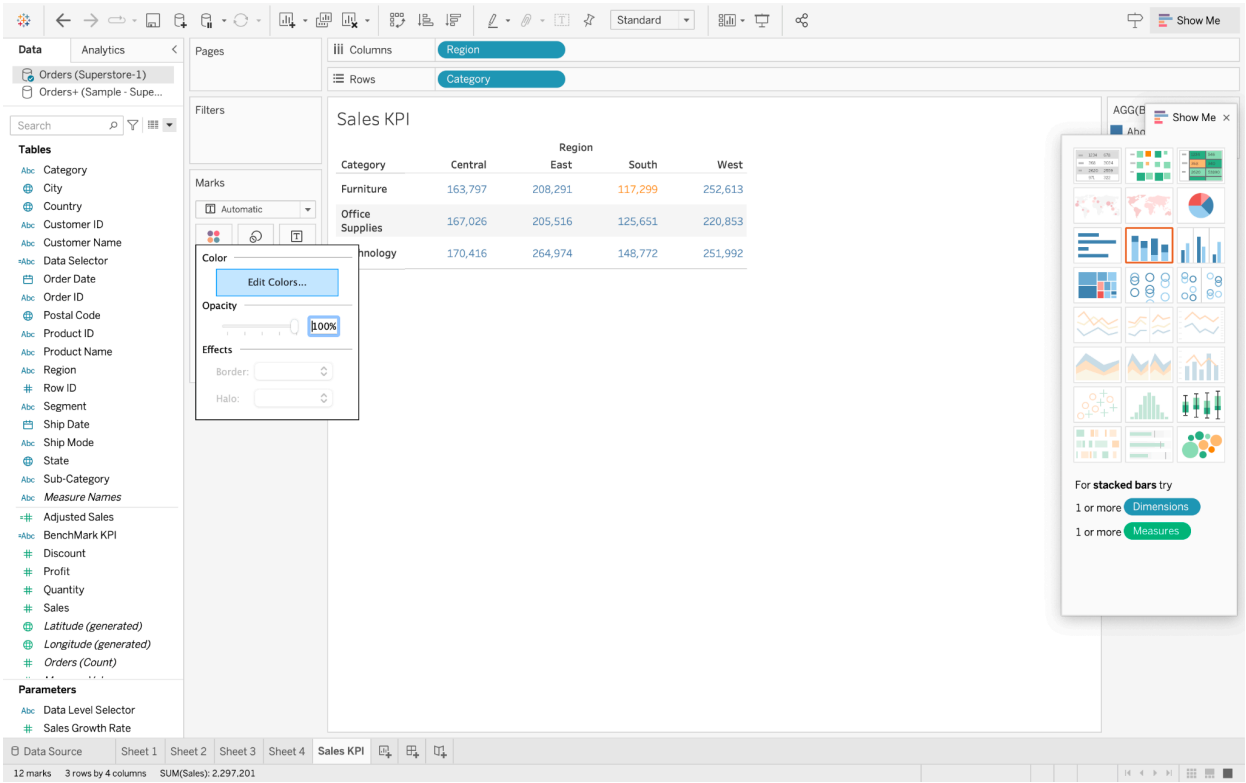
IF SUM([Sales]) > 50000 THEN
"Above Benchmark"
ELSE
"Below Benchmark"
END

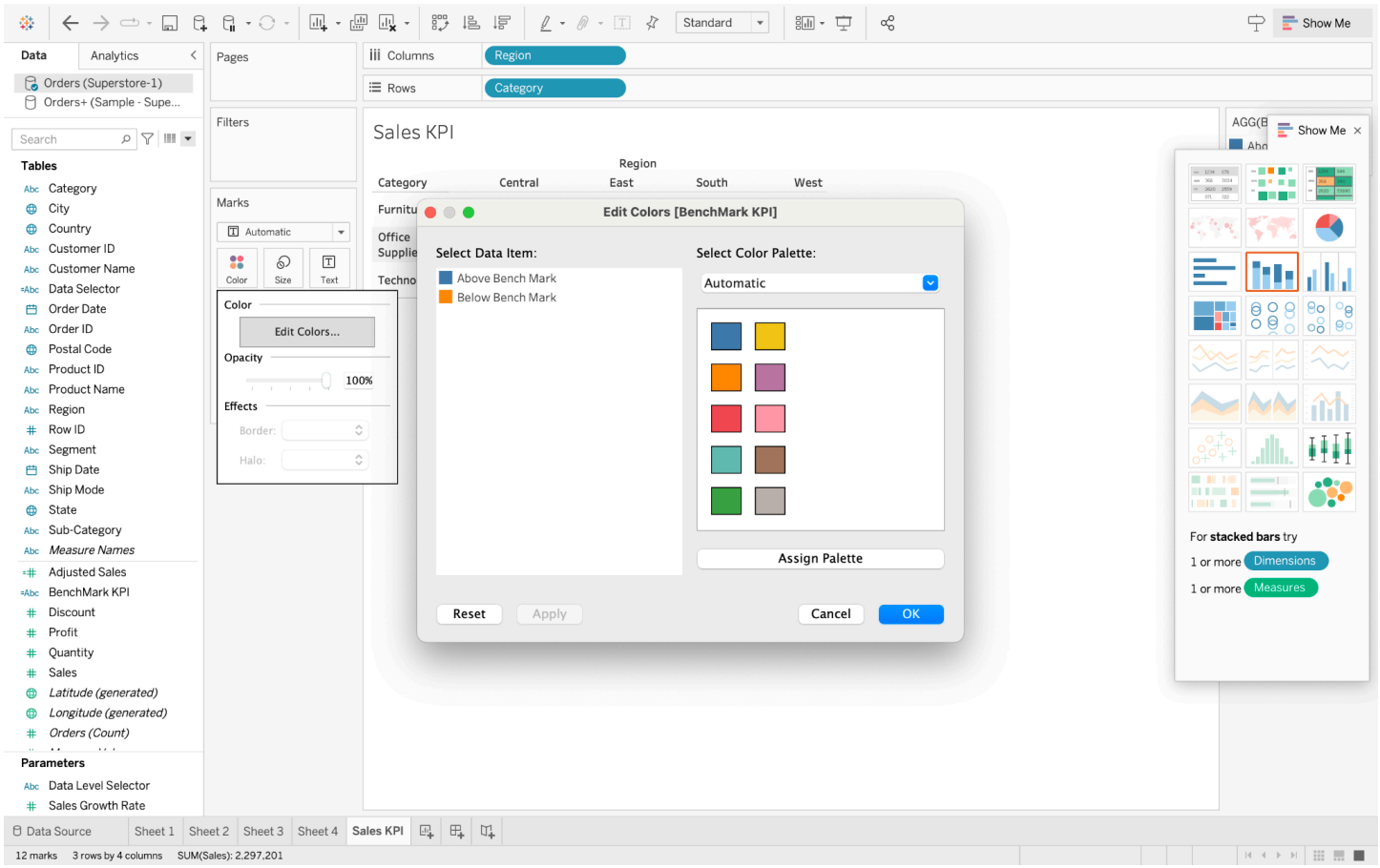


Step 3: Dragging the BenckMark KPI into Color shelf.



Step 4: Customizing the colors by editing them and assigning the green for values above them and red for values below them.




Data
Analytics
Orders (Superstore-1)
Orders+ (Sample - Supe...
Search
Tables
Abc Category
City
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Abc Customer Name
Abc Data Selector
Order Date
Abc Order ID
Postal Code
Abc Product ID
Abc Product Name
Abc Region
Row ID
Abc Segment
Ship Date
Abc Ship Mode
State
Abc Sub-Category
Abc Measure Names
Adjusted Sales
Abc BenchMark KPI
Discount
Profit
Quantity
Sales
Latitude (generated)
Longitude (generated)
Orders (Count)
Parameters
Abc Data Level Selector
Sales Growth Rate
Pages
Filters
Marks
Automatic
Color
Size
Text
Color
Edit Colors...
Opacity
100%
Effects
Border:
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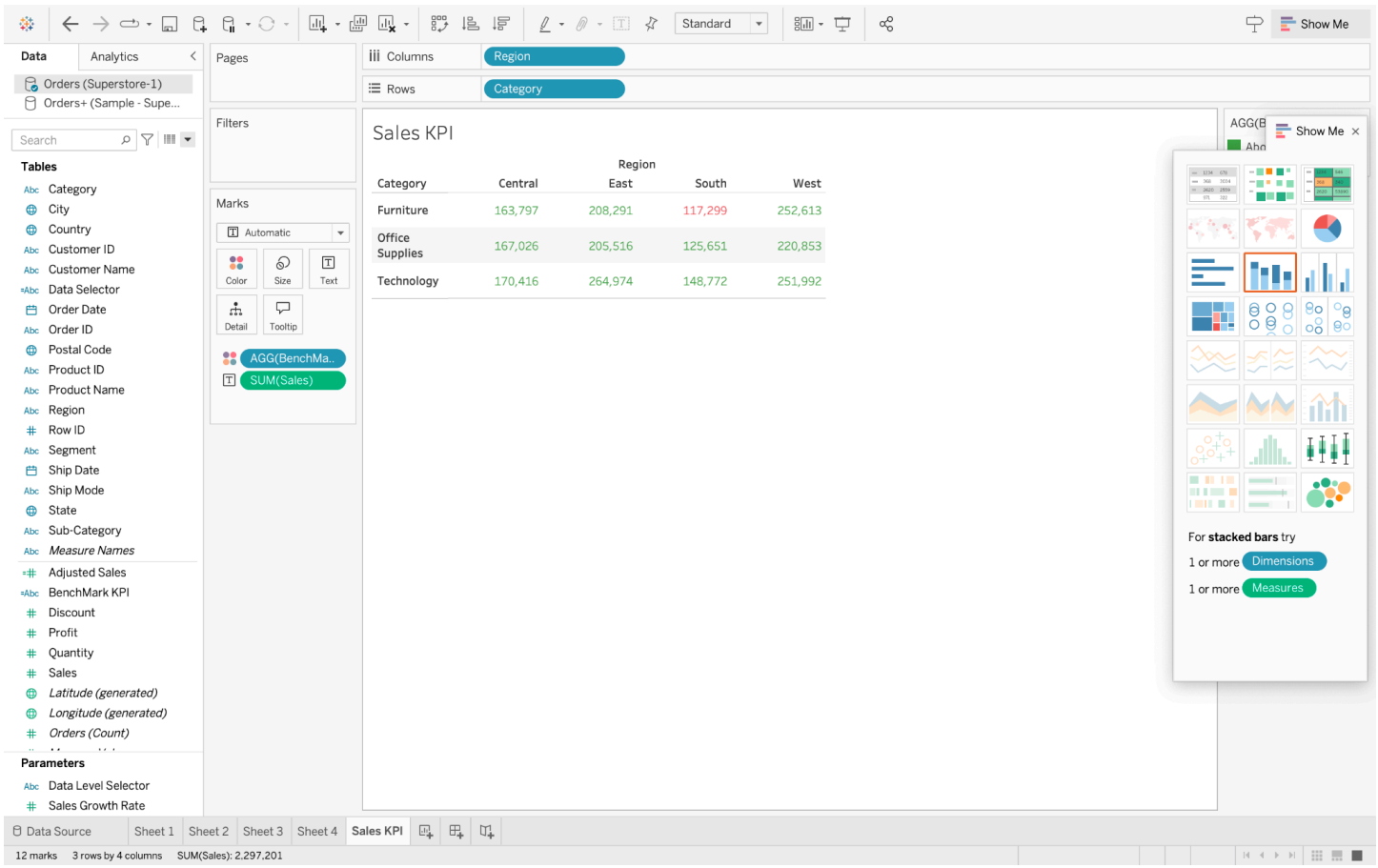
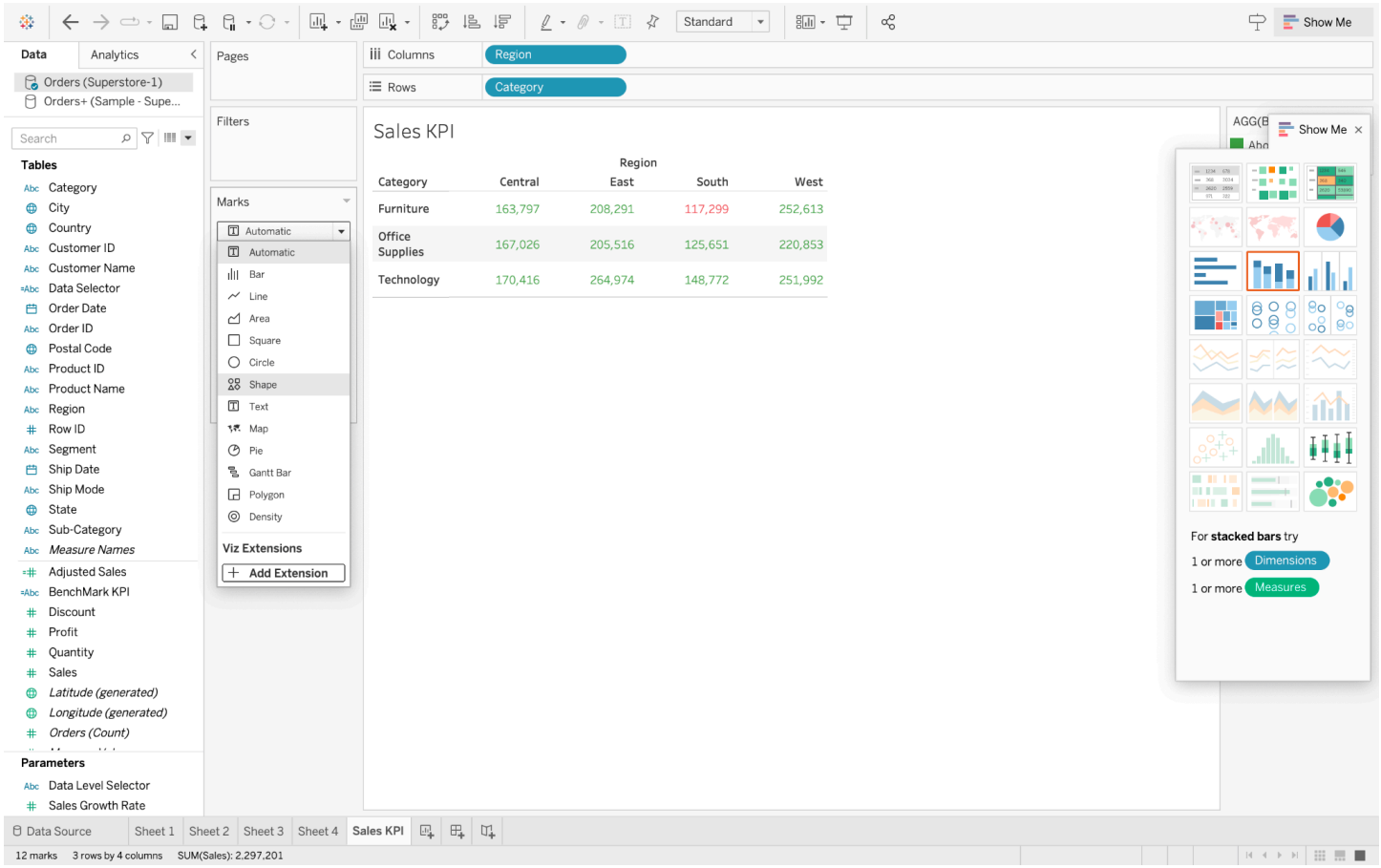
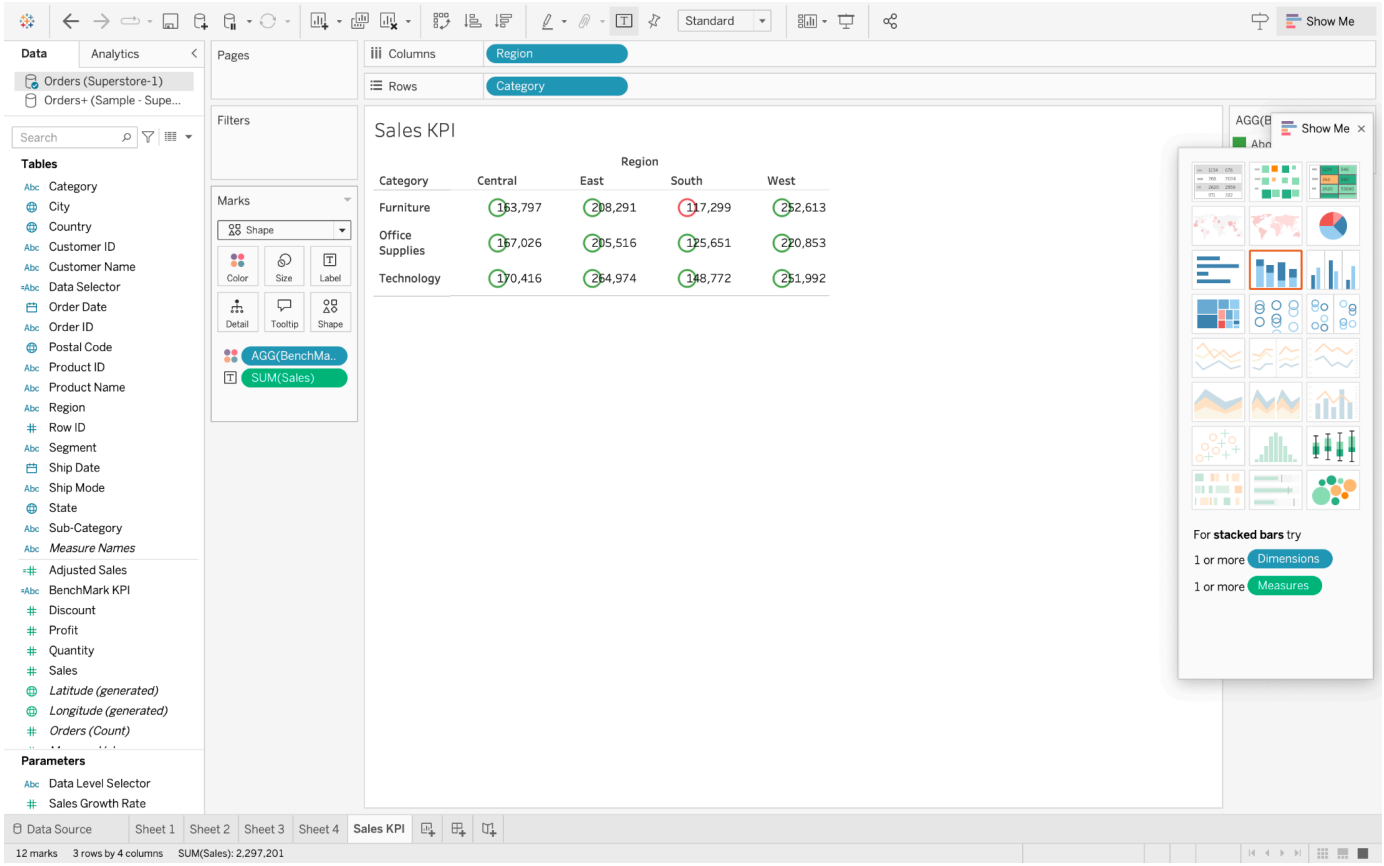
Standard
Show Me
Columns
Region
Rows
Category
Sales KPI
Region
Category
Central
East
South
West
Furnitu
Office Supplie
Techno
Edit Colors [BenchMark KPI]
Select Data Item:
Above Bench Mark
Below Bench Mark
Select Color Palette:
Automatic
Assign Palette
Reset
Apply
Cancel
OK
For stacked bars try
1 or more Dimensions
1 or more Measures
Data Source
Sheet 1
Sheet 2
Sheet 3
Sheet 4
Sales KPI
12 marks
3 rows by 4 columns
SUM(Sales): 2,297,201

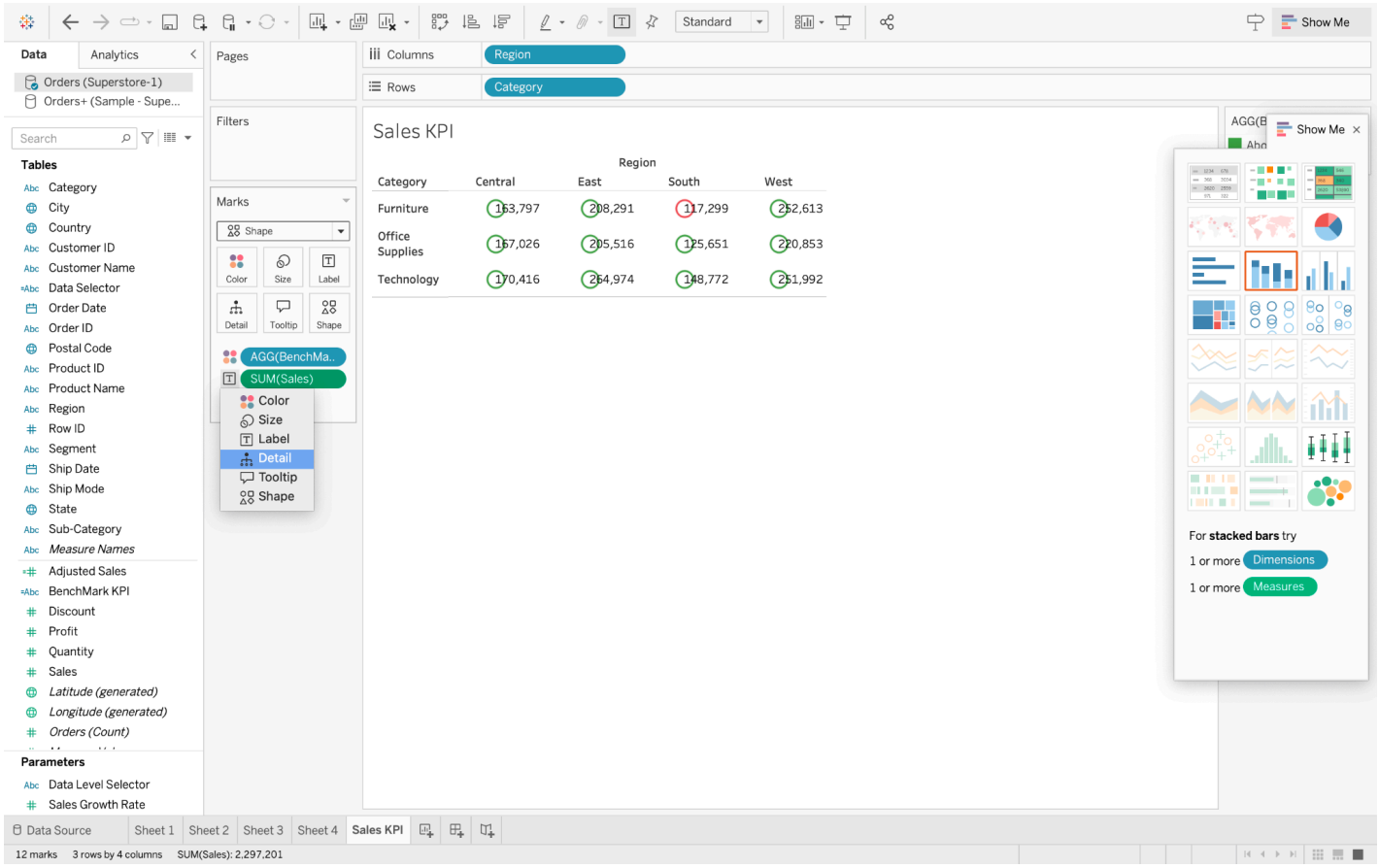

Data
Analytics
Orders (Superstore-1)
Orders+ (Sample - Supe...
Search
Tables
Abc Category
City
Country
Abc Customer ID
Abc Customer Name
Abc Data Selector
Order Date
Abc Order ID
Postal Code
Abc Product ID
Abc Product Name
Abc Region
Row ID
Abc Segment
Ship Date
Abc Ship Mode
State
Abc Sub-Category
Abc Measure Names
Adjusted Sales
Abc BenchMark KPI
Discount
Profit
Quantity
Sales
Latitude (generated)
Longitude (generated)
Orders (Count)
Parameters
Abc Data Level Selector
Sales Growth Rate
Pages
Filters
Marks
Automatic
Color
Size
Text
Detail
Tooltip
AGG(BenchMa..
SUM(Sales)
Standard
Show Me
Columns
Region
Rows
Category
Sales KPI
Region
Category
Central
East
South
West
Furniture
163,797
208,291
117,299
252,613
Office Supplies
167,026
205,516
125,651
220,853
Technology
170,416
264,974
148,772
251,992
For stacked bars try
1 or more Dimensions
1 or more Measures
Data Source
Sheet 1
Sheet 2
Sheet 3
Sheet 4
Sales KPI
12 marks
3 rows by 4 columns
SUM(Sales): 2,297,201

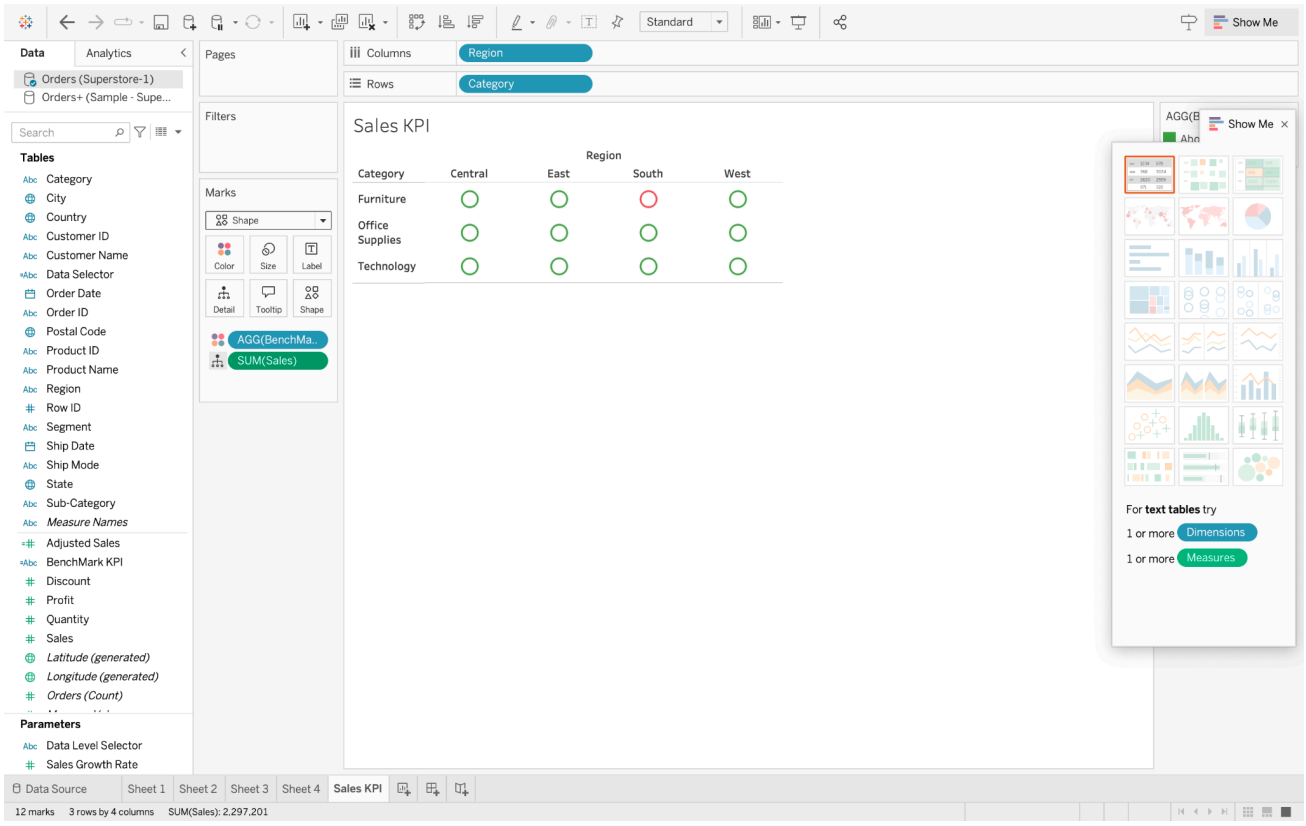
Step 5: changing the shape in Mark Type



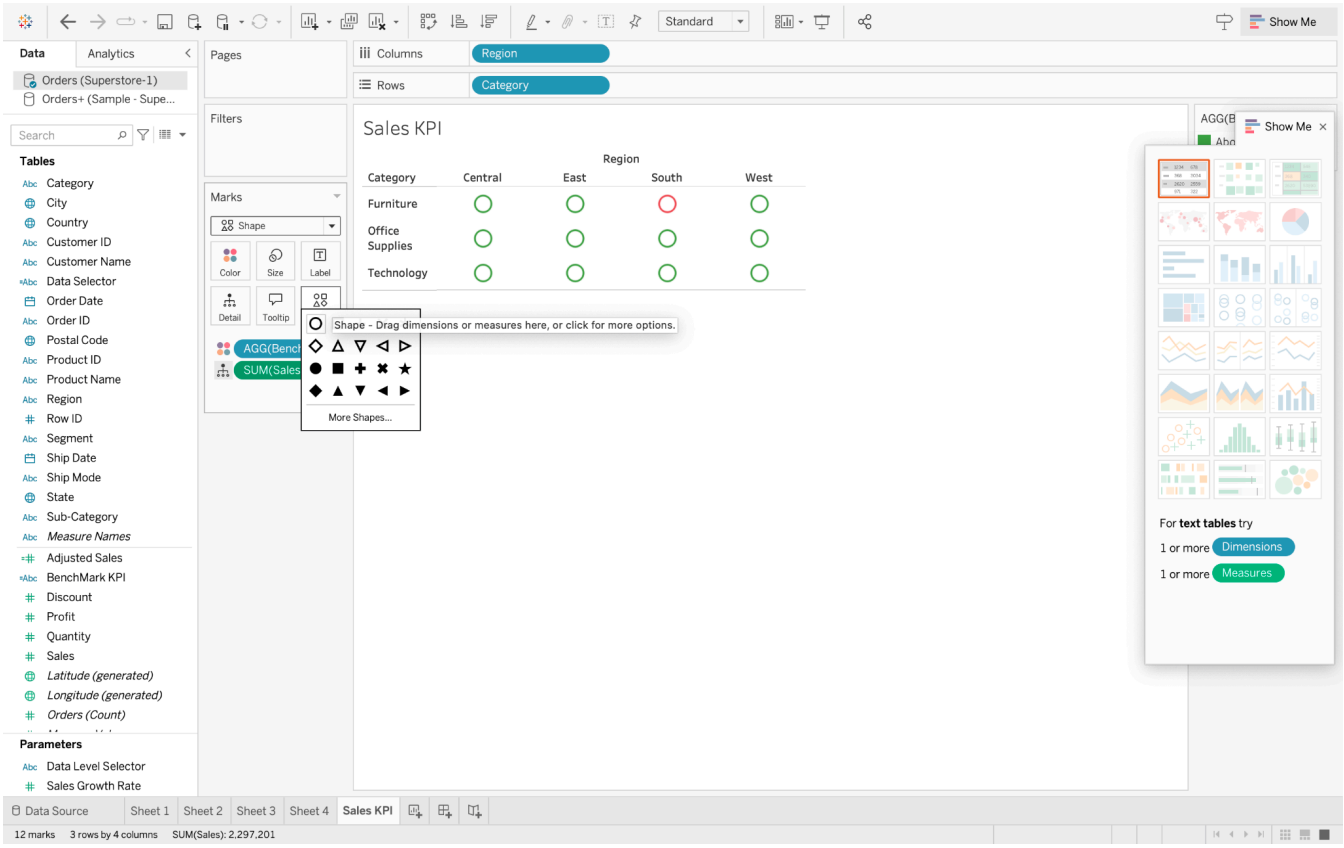


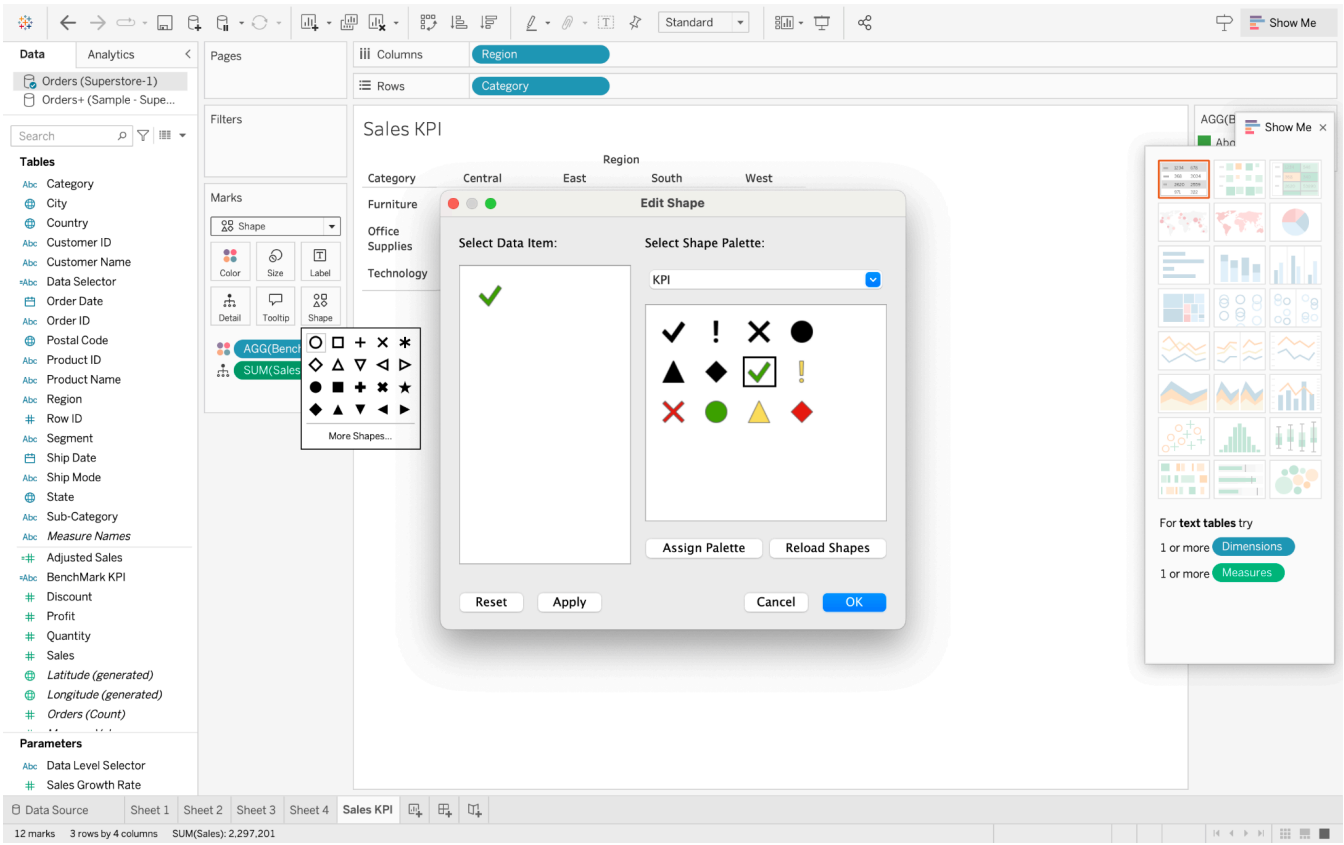
Step 6: The Tableau uses the hollow circle shape. We are moving the sales information to the detail shelf and we are not displaying the sales values.

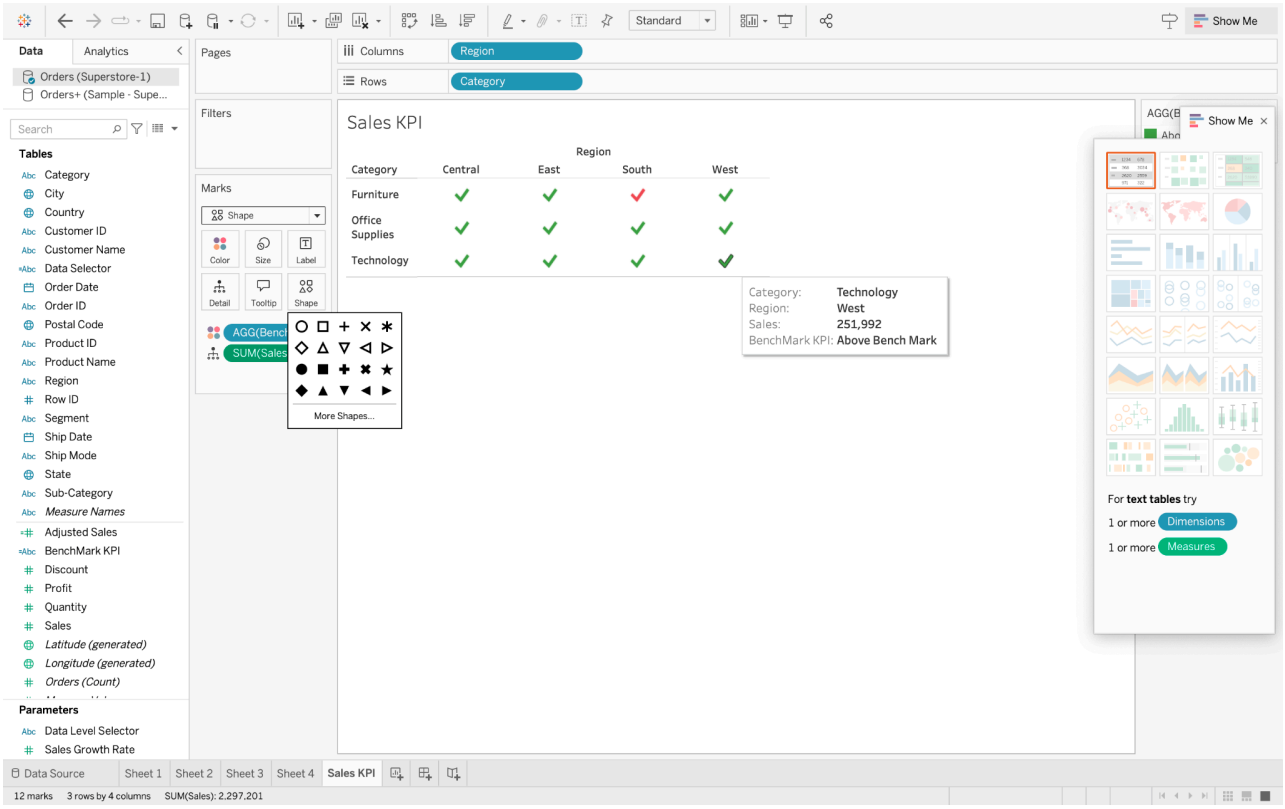




Step 7: We are changing the shape by clicking on the shape shelf >> More shapes>> KPI in shape palette >> selecting the desired shape >> click on done >> click ok and apply changes.

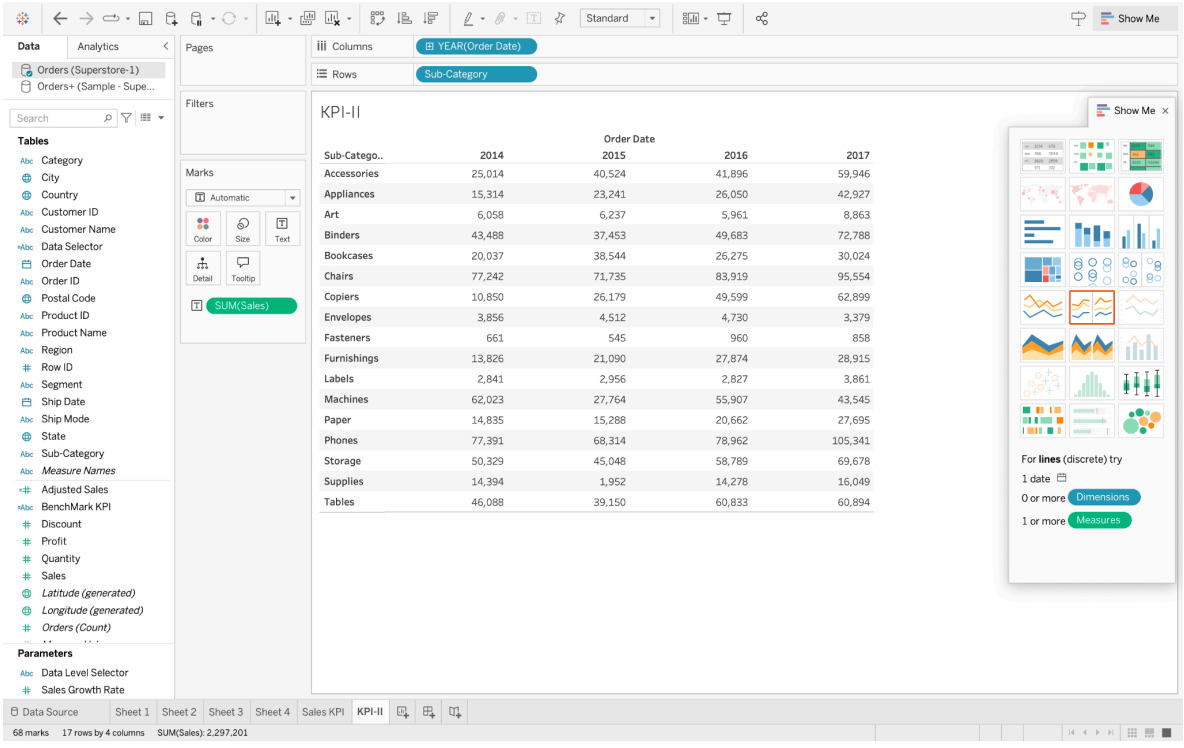






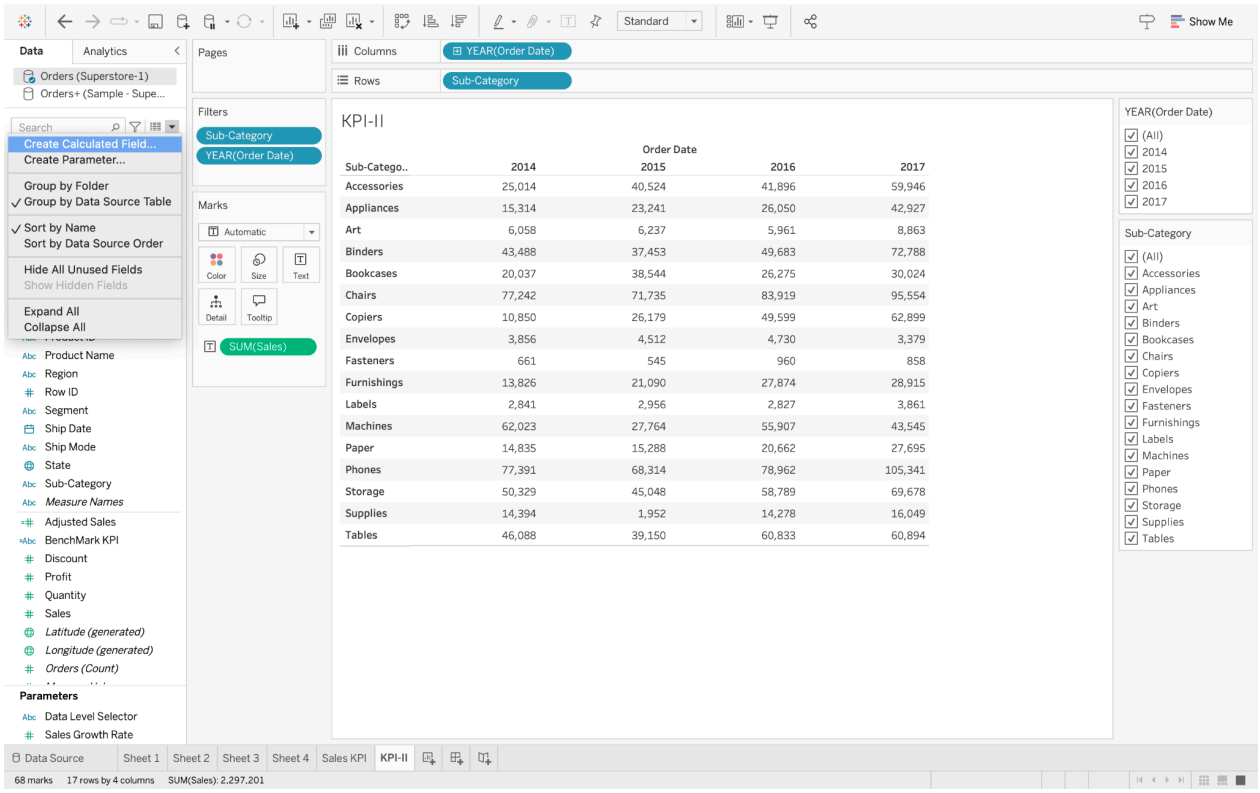
Question - 3

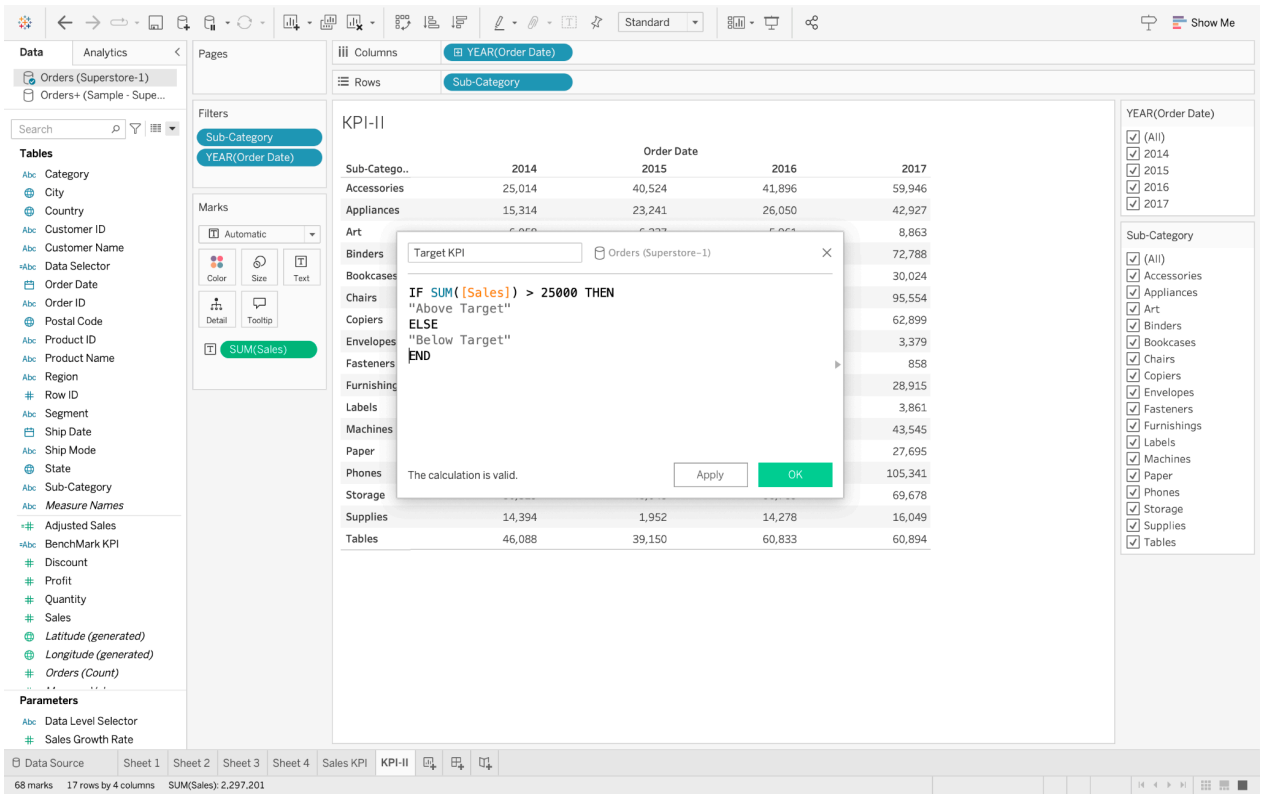
1) Create a new worksheet named Sales KPI-II. And Setting up the visualization: Drag Sub-category to the Rows shelf. Drag Order Date to the Columns shelf. Drag Sales to the Text shelf.



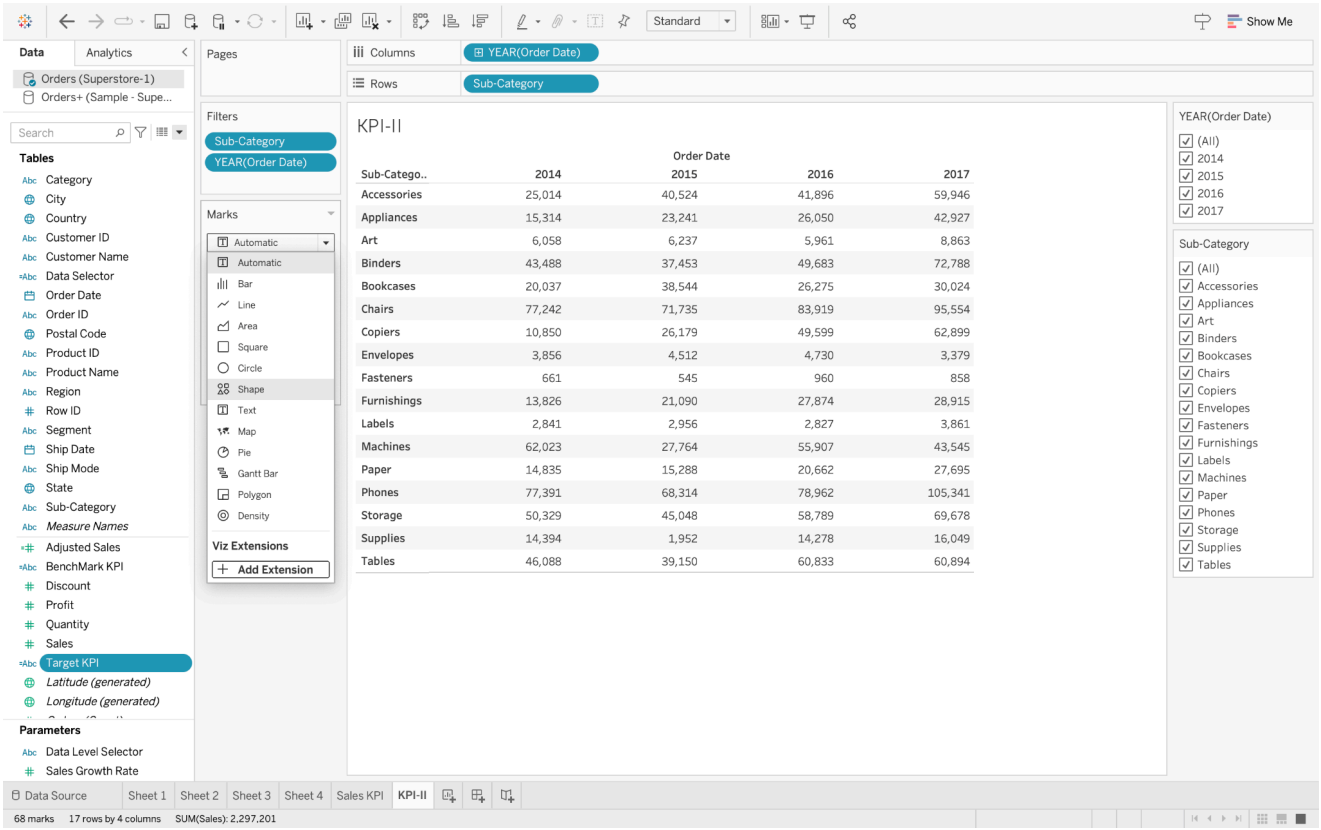
2) Creating a new calculated field named `Target KPI` using the formula:

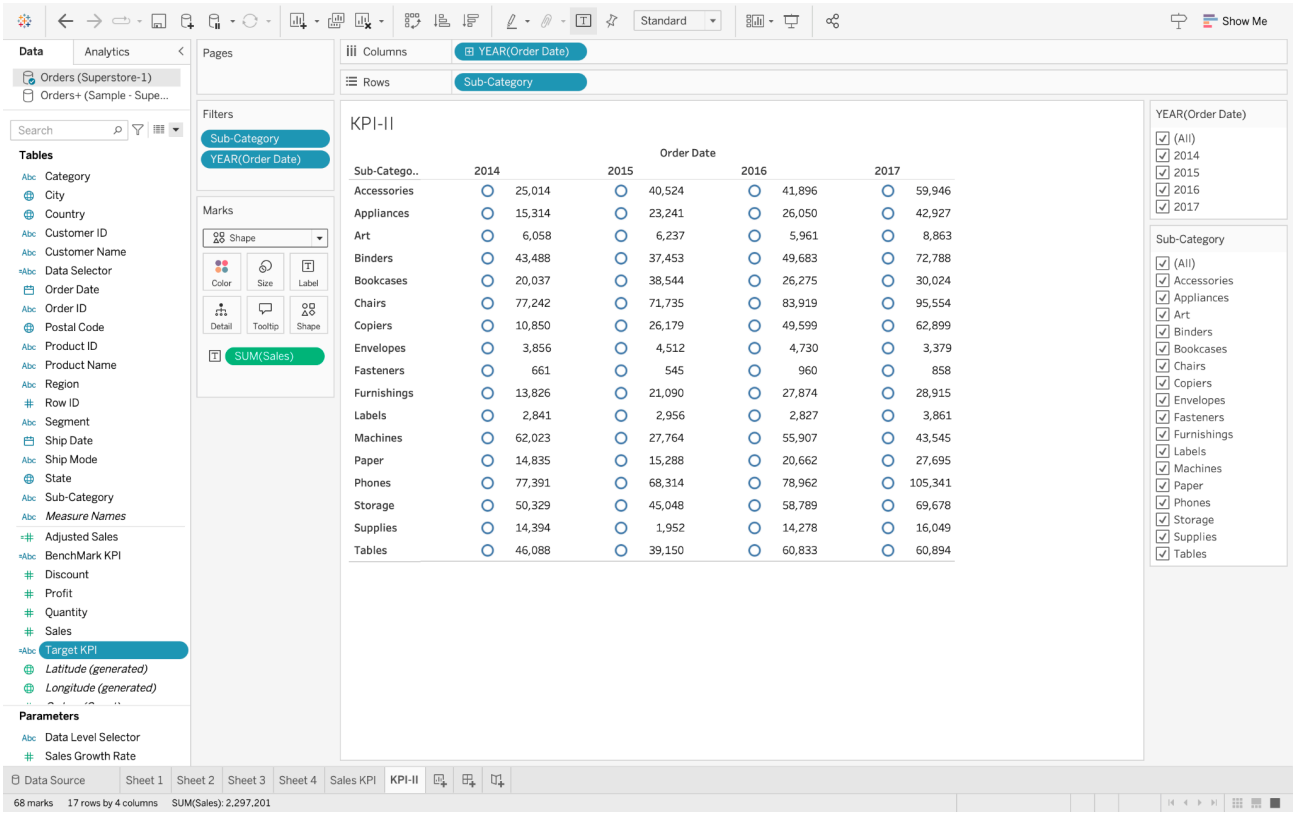
```
IF SUM([Sales]) > 25000 THEN
"Above Target"
ELSE
"Below Target"
END
```

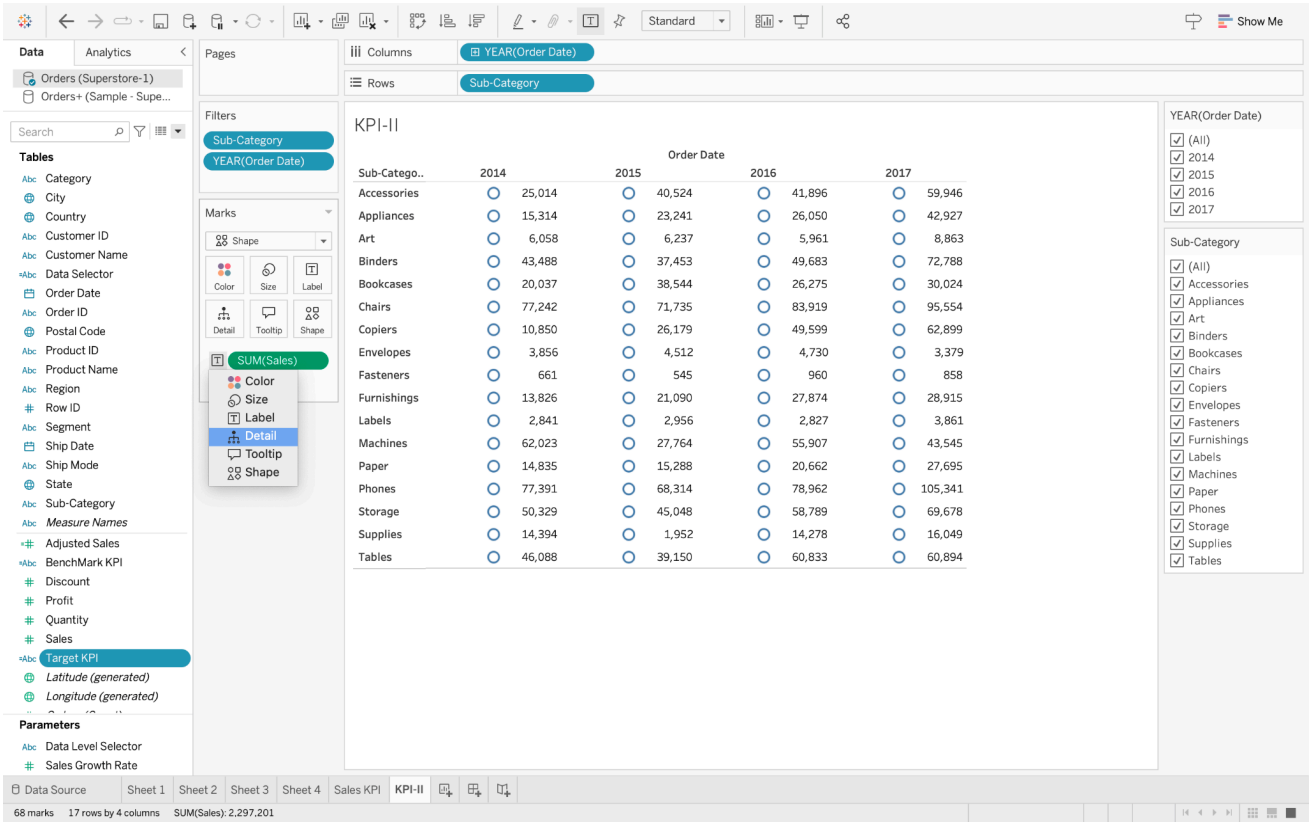


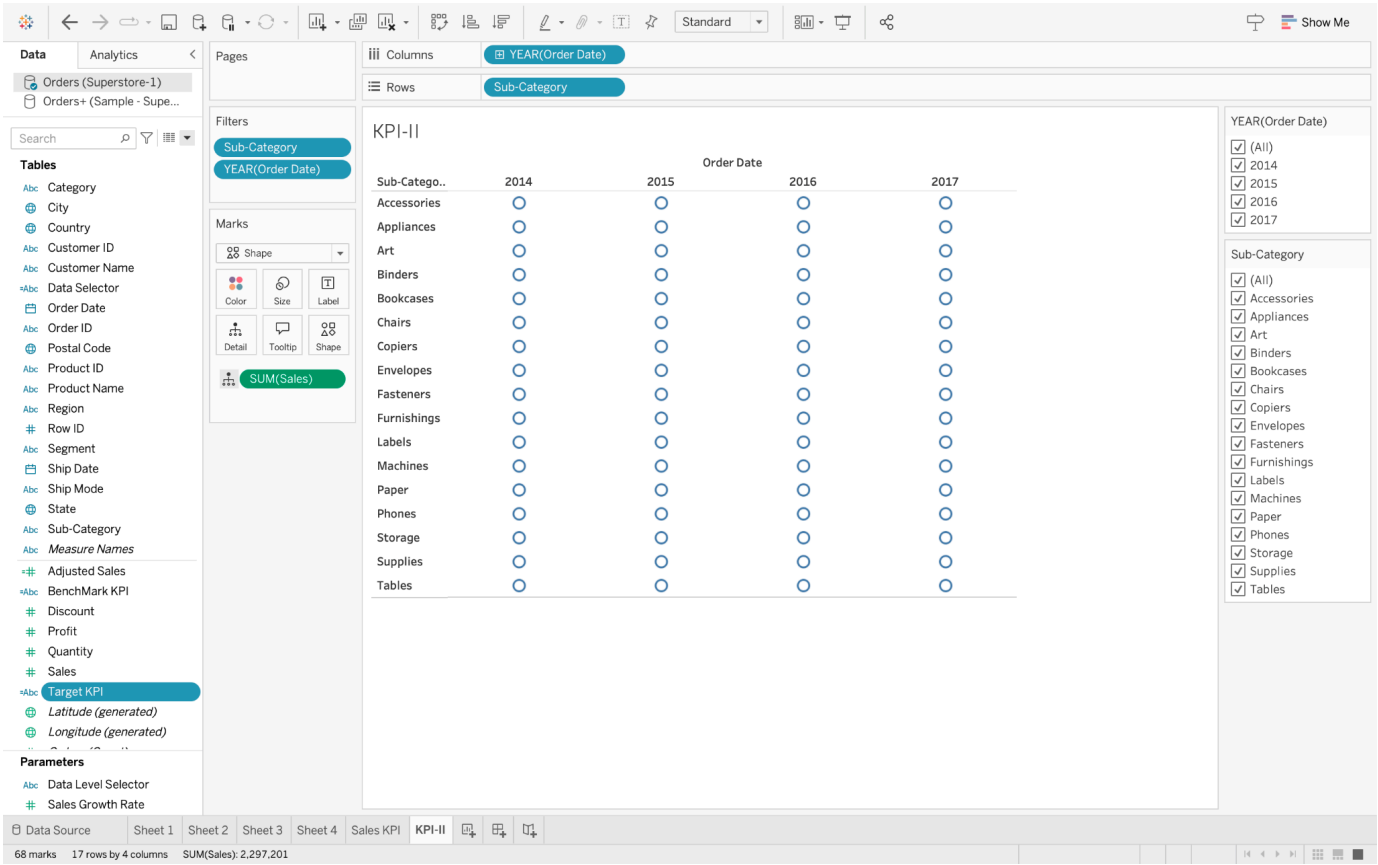


3) Changing the default shapes to tick marks and assign colors accordingly. Analyze the results to identify which subcategories are performing above or below target levels.

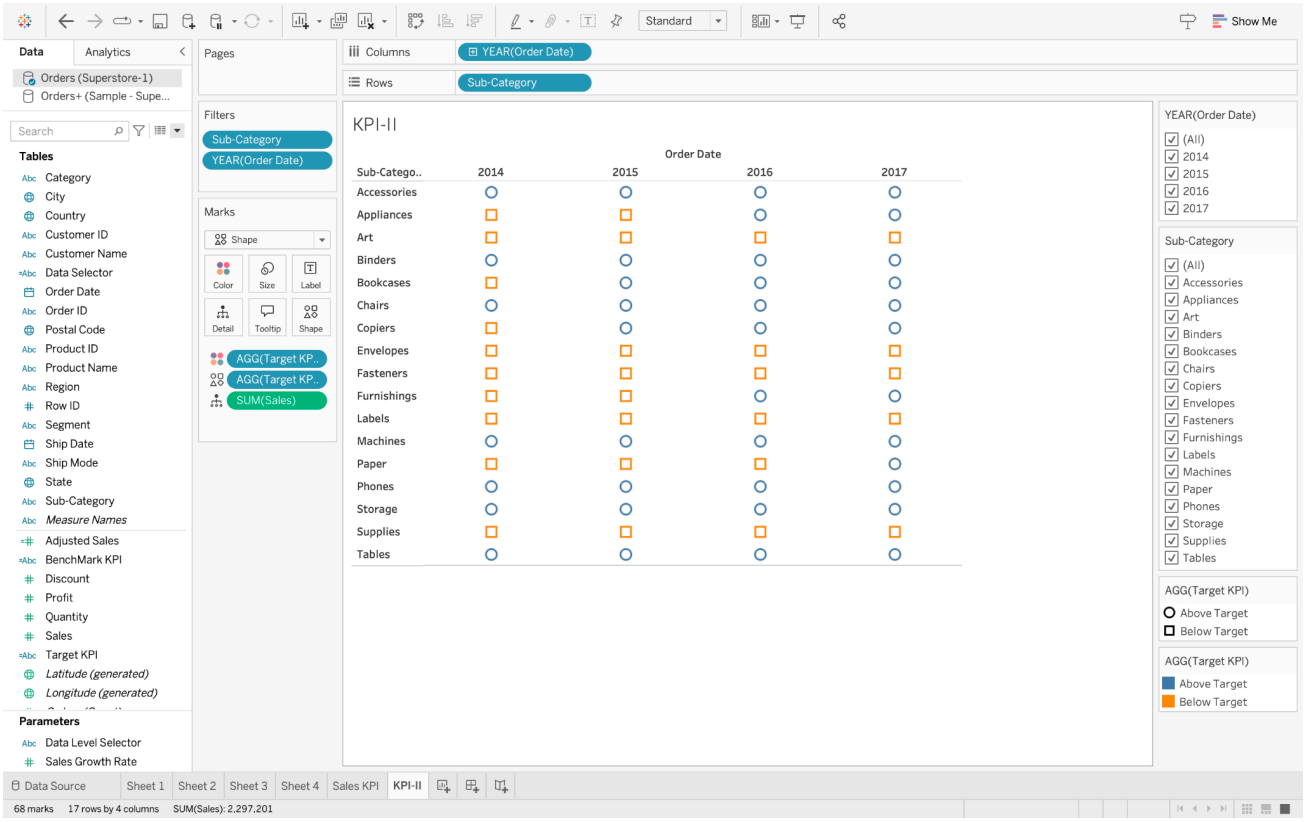


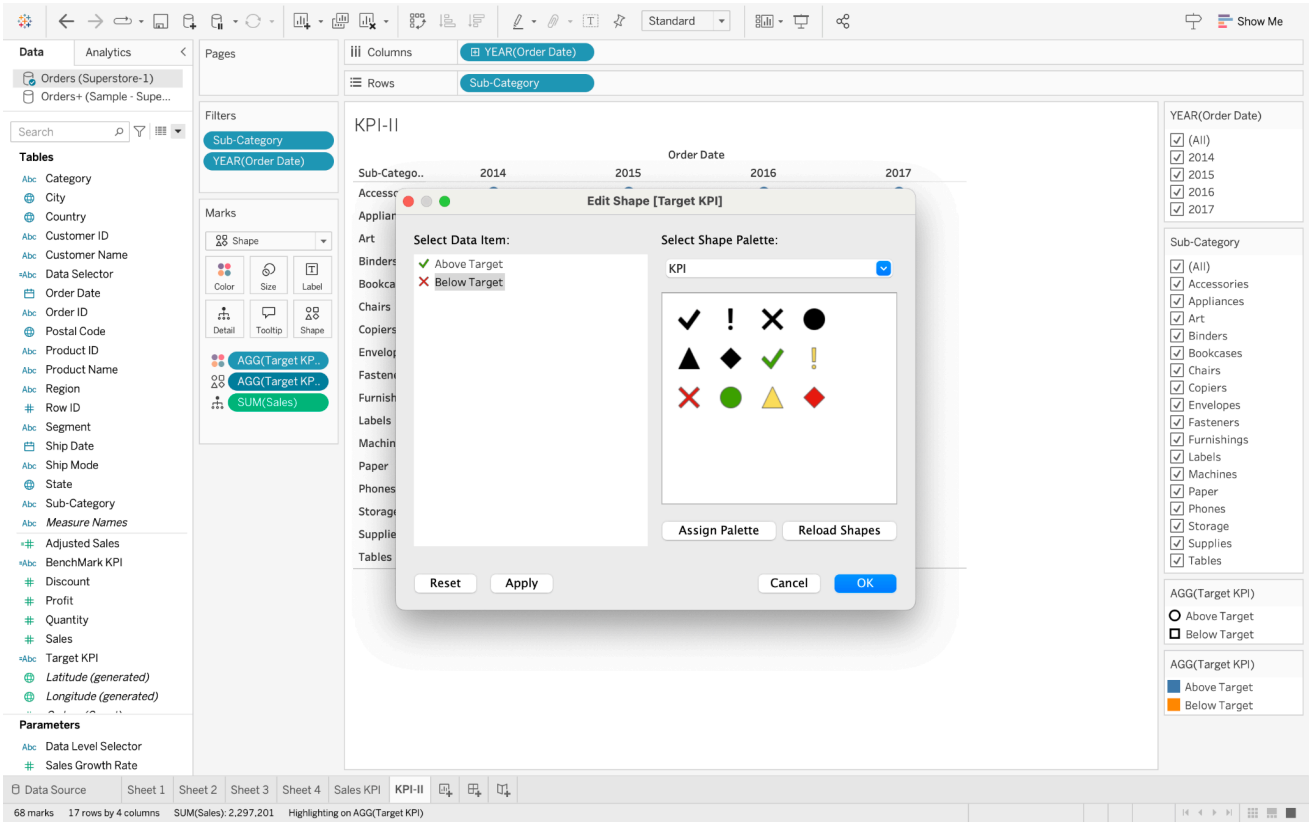


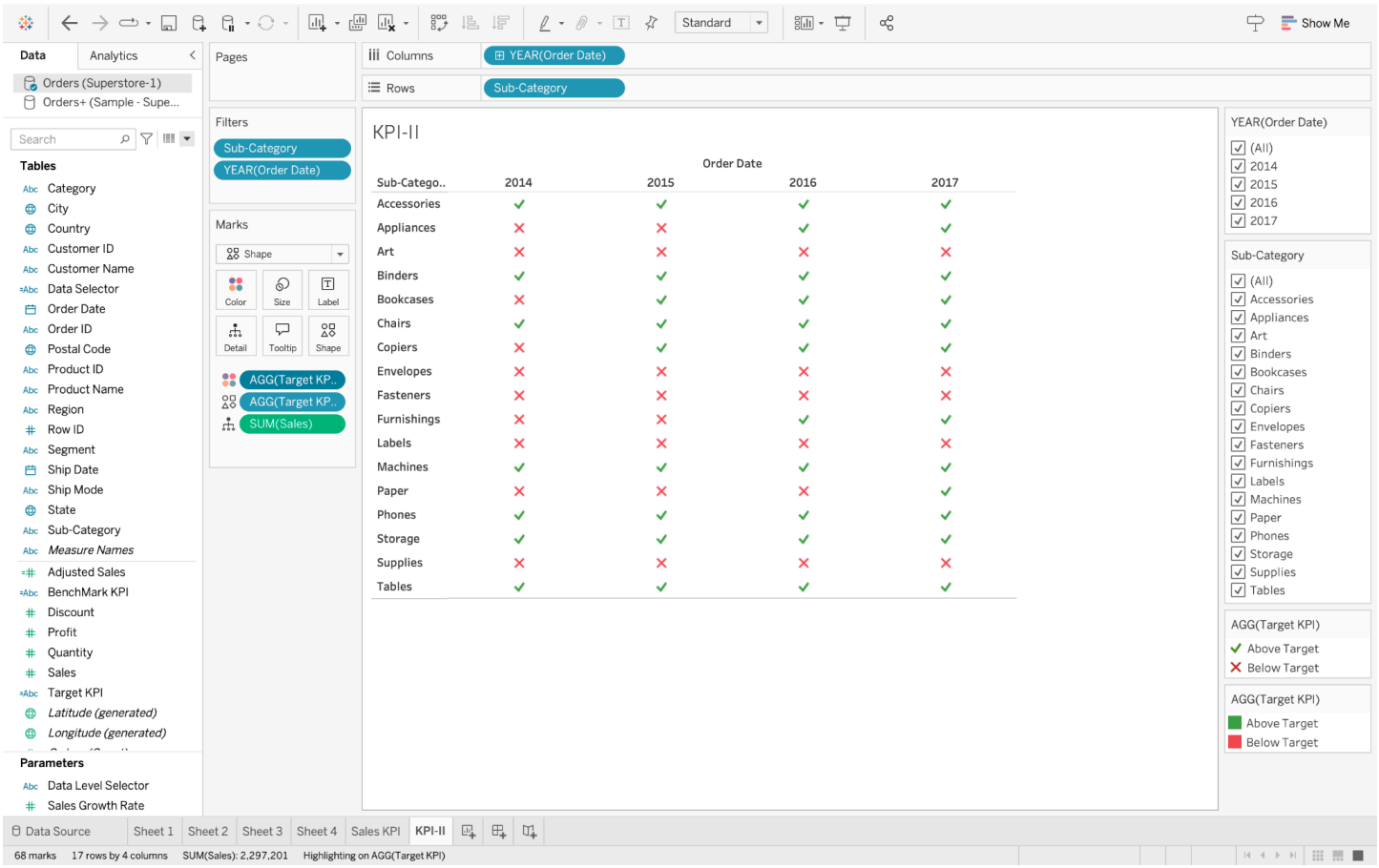

Standard
Show Me
Data
Analytics
Orders (Superstore-1)
Orders+ (Sample - Supe...
Search
Tables
Category
City
Country
Customer ID
Customer Name
Data Selector
Order Date
Order ID
Postal Code
Product ID
Product Name
Region
Row ID
Segment
Ship Date
Ship Mode
State
Sub-Category
Measure Names
Adjusted Sales
BenchMark KPI
Discount
Profit
Quantity
Sales
Target KPI
Latitude (generated)
Longitude (generated)
Parameters
Data Level Selector
Sales Growth Rate
Pages
Filters
Sub-Category
YEAR(Order Date)
Marks
Shape
Color
Size
Label
Detail
Tooltip
Shape
SUM(Sales)
Color
Size
Label
Detail
Tooltip
Shape
Columns
YEAR(Order Date)
Rows
Sub-Category
KPI-II
Order Date
Sub-Catego..
2014
2015
2016
2017
Accessories 25,014 40,524 41,896 59,946
Appliances 15,314 23,241 26,050 42,927
Art 6,058 6,237 5,961 8,863
Binders 43,488 37,453 49,683 72,788
Bookcases 20,037 38,544 26,275 30,024
Chairs 77,242 71,735 83,919 95,554
Copiers 10,850 26,179 49,599 62,899
Envelopes 3,856 4,512 4,730 3,379
Fasteners 661 545 960 858
Furnishings 13,826 21,090 27,874 28,915
Labels 2,841 2,956 2,827 3,861
Machines 62,023 27,764 55,907 43,545
Paper 14,835 15,288 20,662 27,695
Phones 77,391 68,314 78,962 105,341
Storage 50,329 45,048 58,789 69,678
Supplies 14,394 1,952 14,278 16,049
Tables 46,088 39,150 60,833 60,894
YEAR(Order Date)
(All)
2014
2015
2016
2017
Sub-Category
(All)
Accessories
Appliances
Art
Binders
Bookcases
Chairs
Copiers
Envelopes
Fasteners
Furnishings
Labels
Machines
Paper
Phones
Storage
Supplies
Tables
Data Source
Sheet 1
Sheet 2
Sheet 3
Sheet 4
Sales KPI
KPI-II
68 marks
17 rows by 4 columns
SUM(Sales): 2,297,201


Standard
Show Me
Data
Analytics
Orders (Superstore-1)
Orders+ (Sample - Supe...
Search
Tables
Category
City
Country
Customer ID
Customer Name
Data Selector
Order Date
Order ID
Postal Code
Product ID
Product Name
Region
Row ID
Segment
Ship Date
Ship Mode
State
Sub-Category
Measure Names
Adjusted Sales
BenchMark KPI
Discount
Profit
Quantity
Sales
Target KPI
Latitude (generated)
Longitude (generated)
Parameters
Data Level Selector
Sales Growth Rate
Pages
Filters
Sub-Category
YEAR(Order Date)
Marks
Shape
Color
Size
Label
Detail
Tooltip
Shape
SUM(Sales)
Columns
YEAR(Order Date)
Rows
Sub-Category
KPI-II
Order Date
Sub-Catego..
2014
2015
2016
2017
Accessories
Appliances
Art
Binders
Bookcases
Chairs
Copiers
Envelopes
Fasteners
Furnishings
Labels
Machines
Paper
Phones
Storage
Supplies
Tables
YEAR(Order Date)
(All)
2014
2015
2016
2017
Sub-Category
(All)
Accessories
Appliances
Art
Binders
Bookcases
Chairs
Copiers
Envelopes
Fasteners
Furnishings
Labels
Machines
Paper
Phones
Storage
Supplies
Tables
Data Source
Sheet 1
Sheet 2
Sheet 3
Sheet 4
Sales KPI
KPI-II
68 marks
17 rows by 4 columns
SUM(Sales): 2,297,201

4) Change the mark type to Shape, move `Sales` from the Text shelf to the Detail shelf, and drag `Target KPI` to the Color shelf.







5) Developing Key Performance Indicators and conducting Sales Analysis in comparison with previous periods or competitors allows to trace the progress trends and make vital choices. For instance, performance metrics may advise rethinking and repurposing resources or revising marketing strategies.