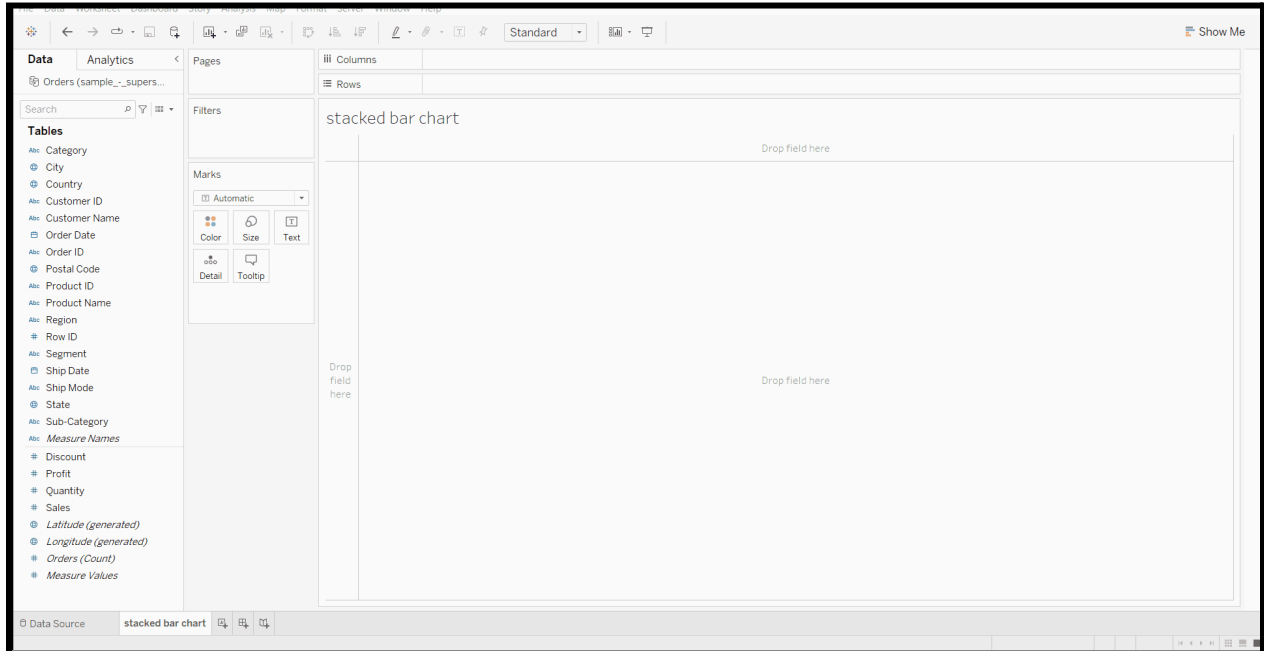


Stacked bar chart

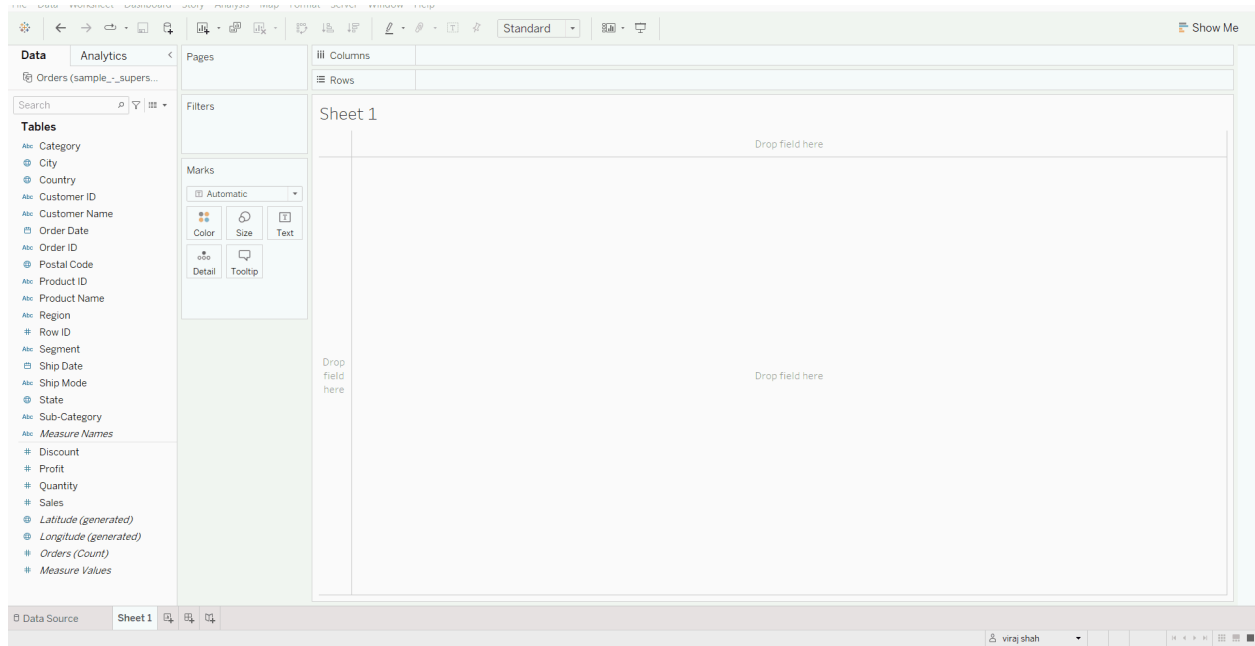
Business problem 1 - display total sales for each categories by region



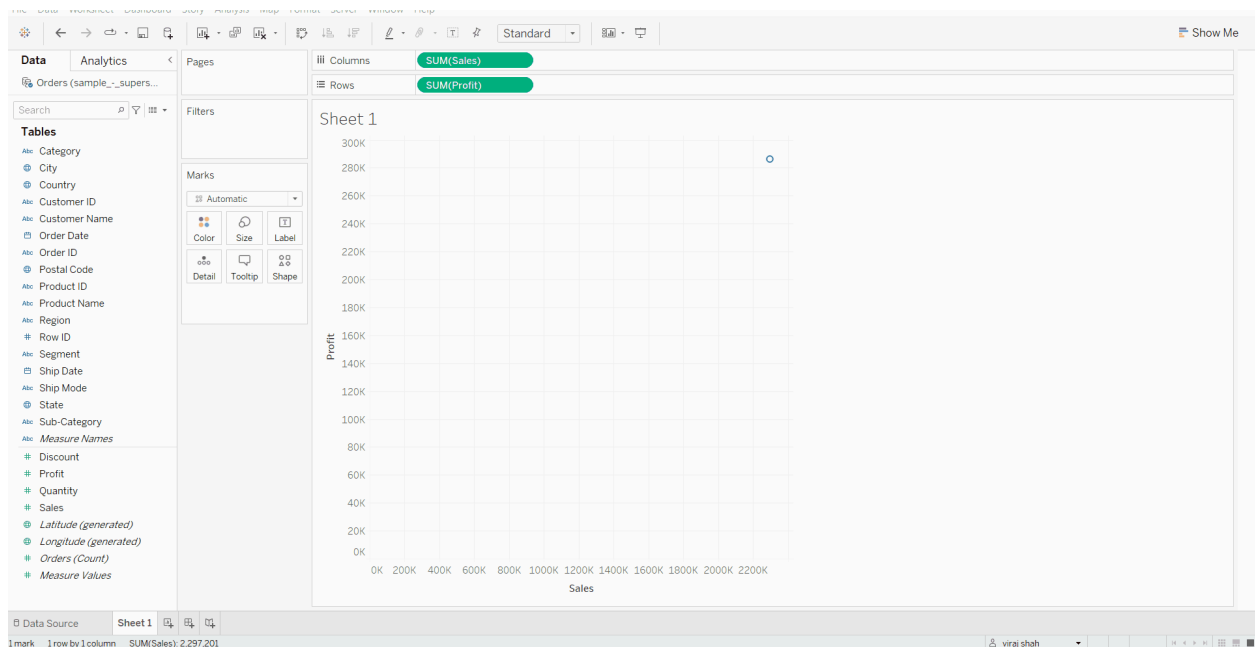
Scatter Plot

Business problem 2 : Find order id that has the highest sales and highest profit value

- Creating a scatter chart what we see below is the total sales and total profit

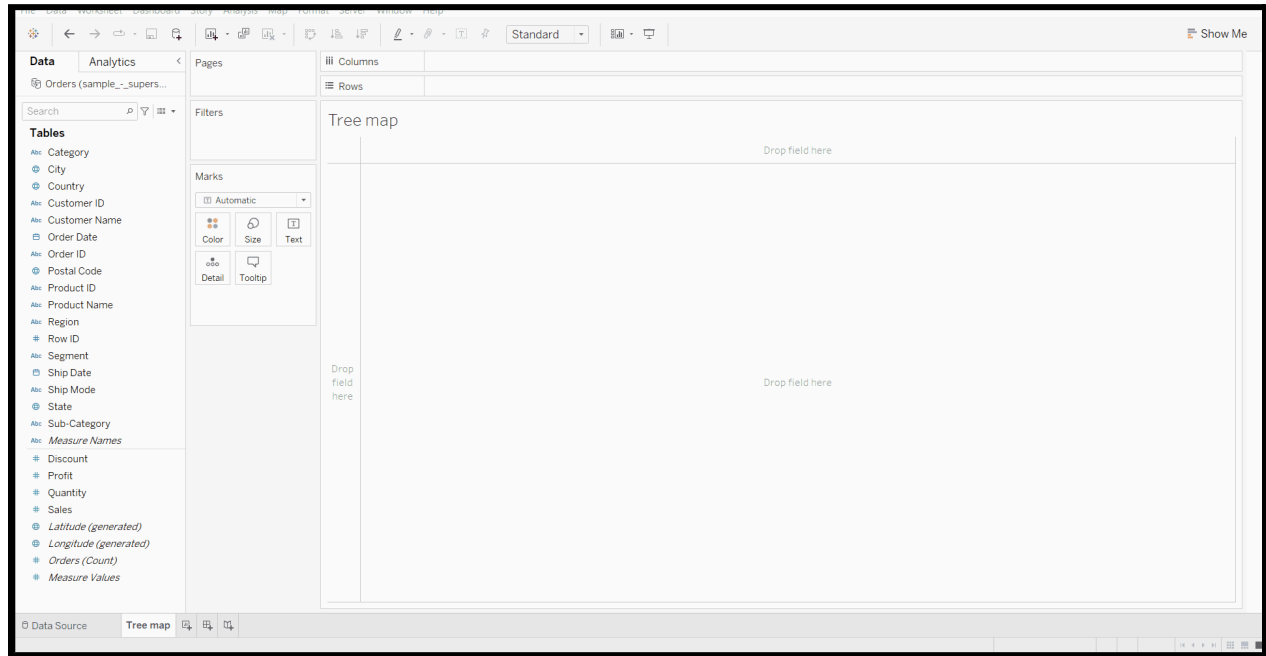


- Disaggregating the measures to plot every row values in the plot and solving the business problem



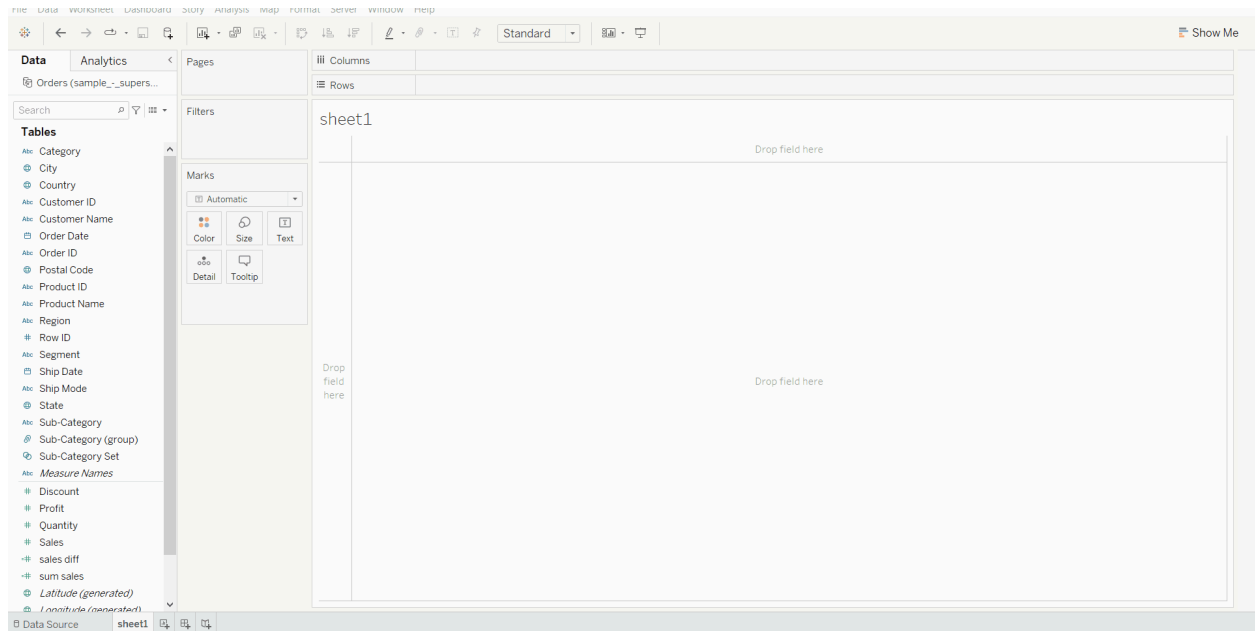
Tree map

Business problem 3 - Find the subcategory that has the highest sales and highest profit



Combined Axis Chart

Business Problem 4 -Compare sales and profit for each category in a single plot



Dual Axis chart

Business Problem 5 -find product that has the lowest discount but has the highest profit



1. Extract Filter

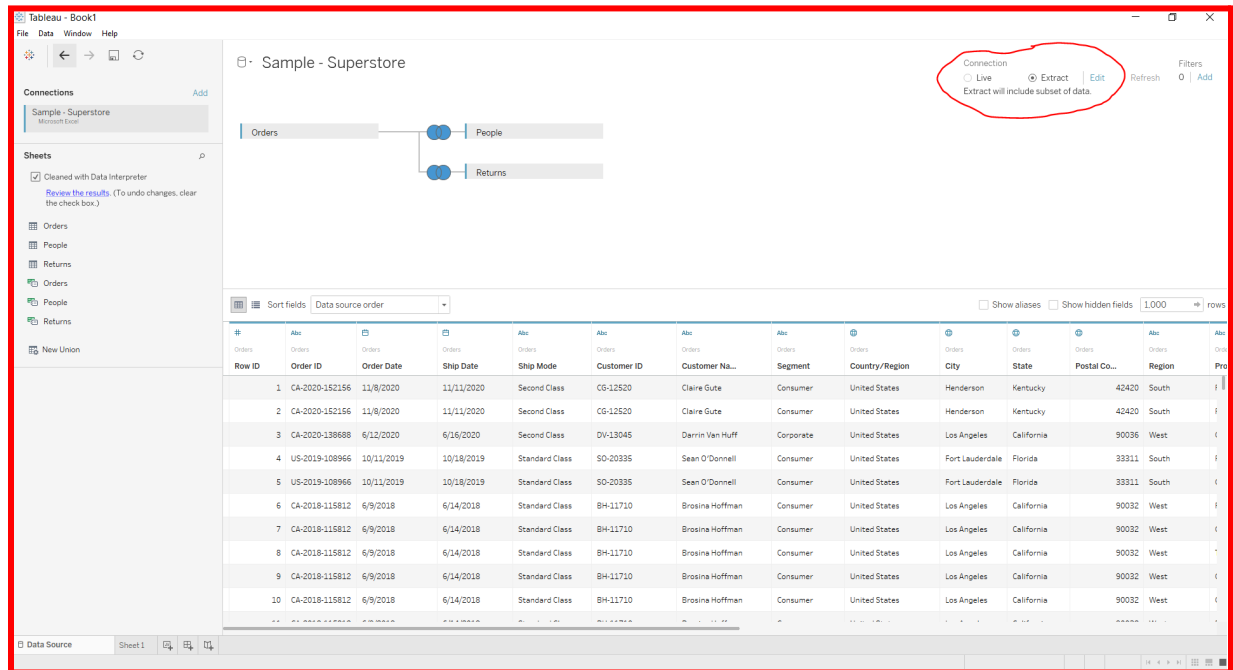
Important Note :

Tableau public always works with extracts, and therefore does not show the options 'Live' and 'Extract'.

Refer :

<https://community.tableau.com/s/question/0D54T00000C5P0ISAF/not-able-to-see-extract-option-in-tableau-public-10>

Here is a screenshot of Tableau Desktop Professional that supports both extract and live connections.



Ref : <https://www.tutorialgateway.org/extract-filters-in-tableau/>

2. Datasource Filter

Business Problem 6 : Show orders which made profit \geq 1K

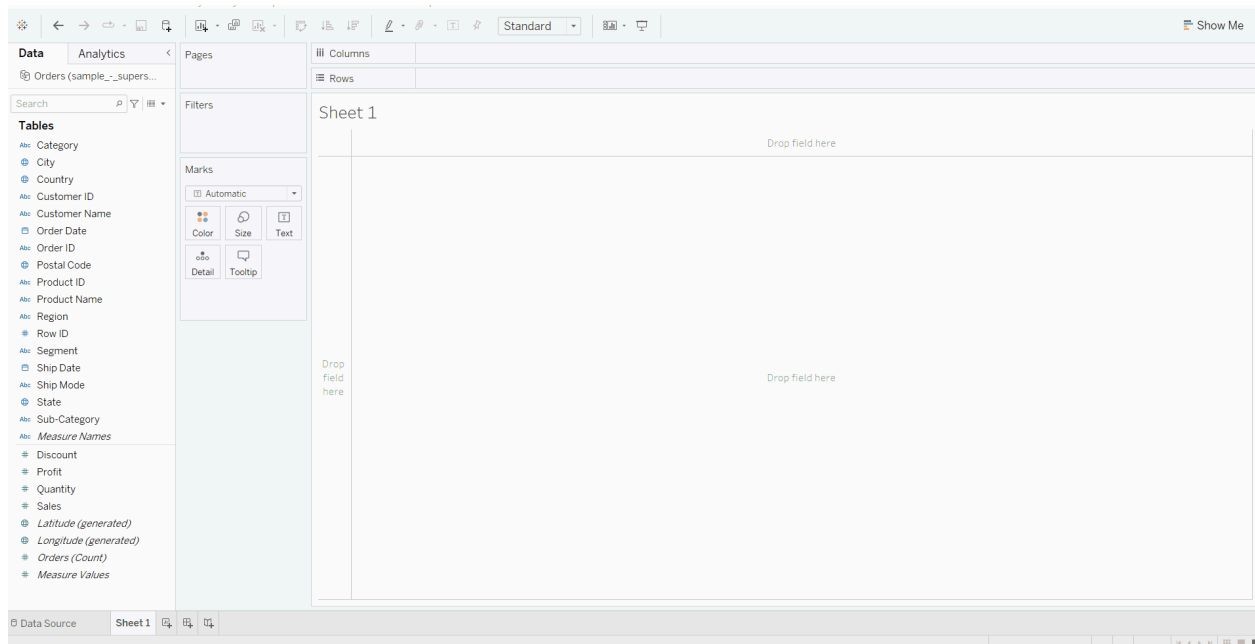
The screenshot shows the Tableau Public interface for a workbook named 'Tableau Public - Book1'. The left sidebar contains a 'Connections' pane with 'Sample - Superstore' (Microsoft Excel) and a 'Sheets' pane with a list of tables: Orders, People, Returns, and a 'New Union' option. The main workspace is titled 'Orders (Sample - Superstore)' and displays a 'Need more data?' message with a prompt to 'Drag tables here to relate them. Learn more'. Below the workspace, a data preview table is shown, displaying 21 fields and 9994 rows. The table includes columns for Name, Category, Sub-Category, Product Name, Sales, Quantity, Discount, and Profit.

Name	Category	Sub-Category	Product Name	Sales	Quantity	Discount	Profit
Orders	Furniture	Bookcases	Bush Somerset Collection Bo...	261.96	2	0.000000	41.91
	Furniture	Chairs	Hon Deluxe Fabric Upholster...	731.94	3	0.000000	219.58
	Office Suppl...	Labels	Self-Adhesive Address Labels...	14.62	2	0.000000	6.87
	Furniture	Tables	Bretford CR4500 Series Slim...	957.58	5	0.450000	-383.03
	Office Suppl...	Storage	Eldon Fold 'N Roll Cart System	22.37	2	0.200000	2.52

3. Context Filter

Business Problem 7 : Find the top ten states in the West region with the highest sales.

1. First we filter out top 10 states by sales
2. Next when we apply filter for region=West
3. We only see 2 entries that instead of 10 that is because top 10 filter gets executed first and then the region filter is executed if you see from the 10 states only 2 states belong to west region
4. Now in order to change the order of operation we add region filter to context filter this ensures that first our region filter gets executed and then the top 10 by sales is executed.



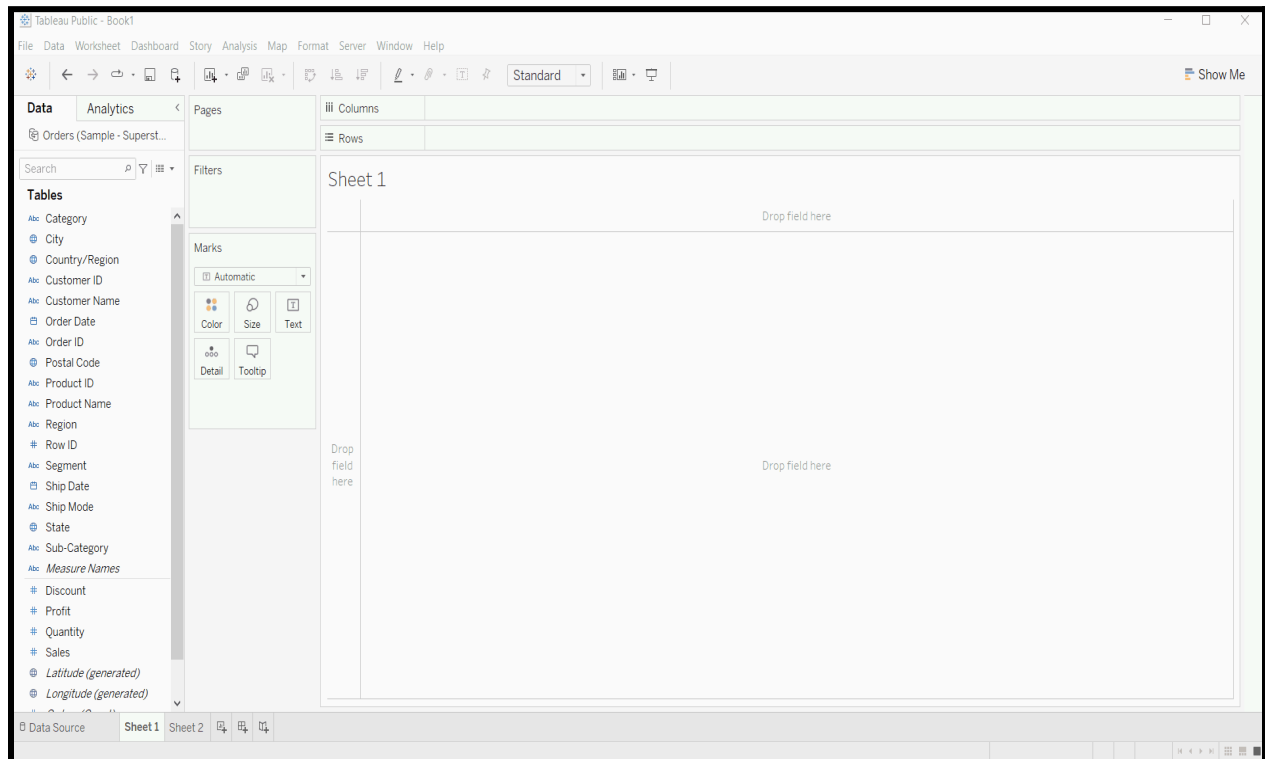
4. Filter on Dimension

Business Problem 8: Show ship mode and subcategories wrt profit where subcategories Labels and Storage are excluded.



5. Filter on measure :

Business Problem 9 : Show only the subcategories whose average profit is greater than 20.

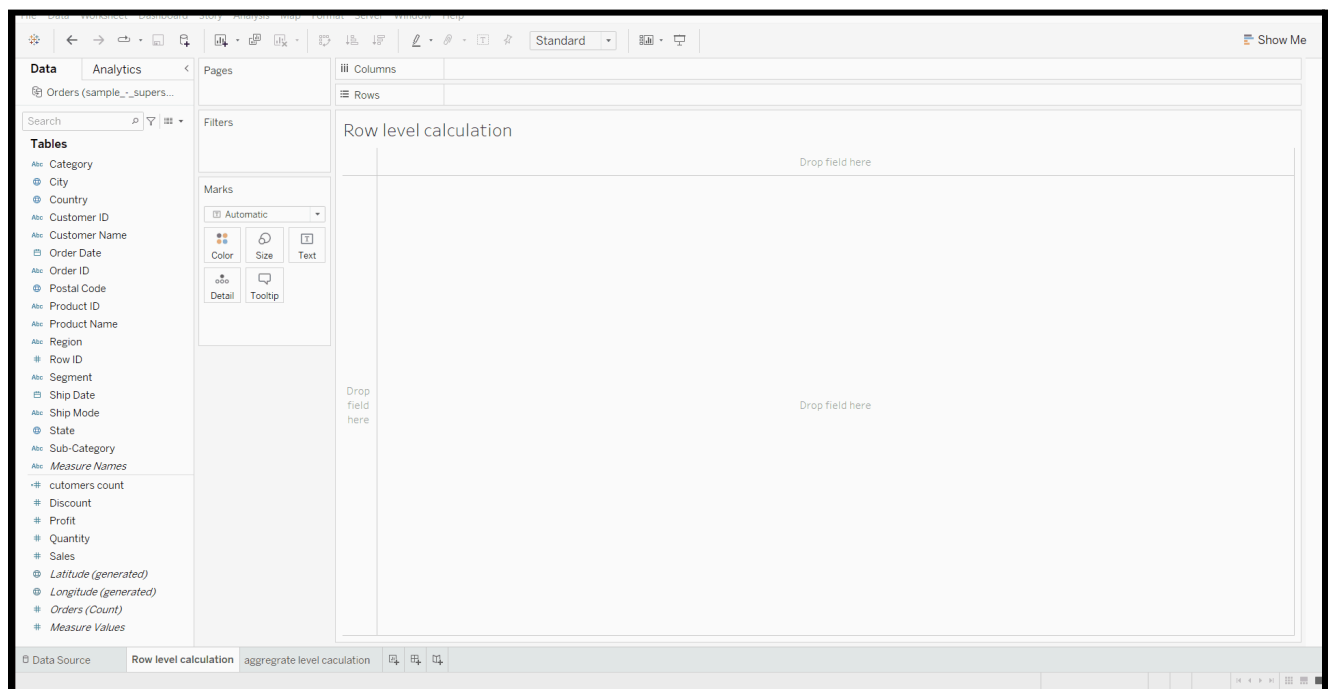


Basic expression Row level calculation

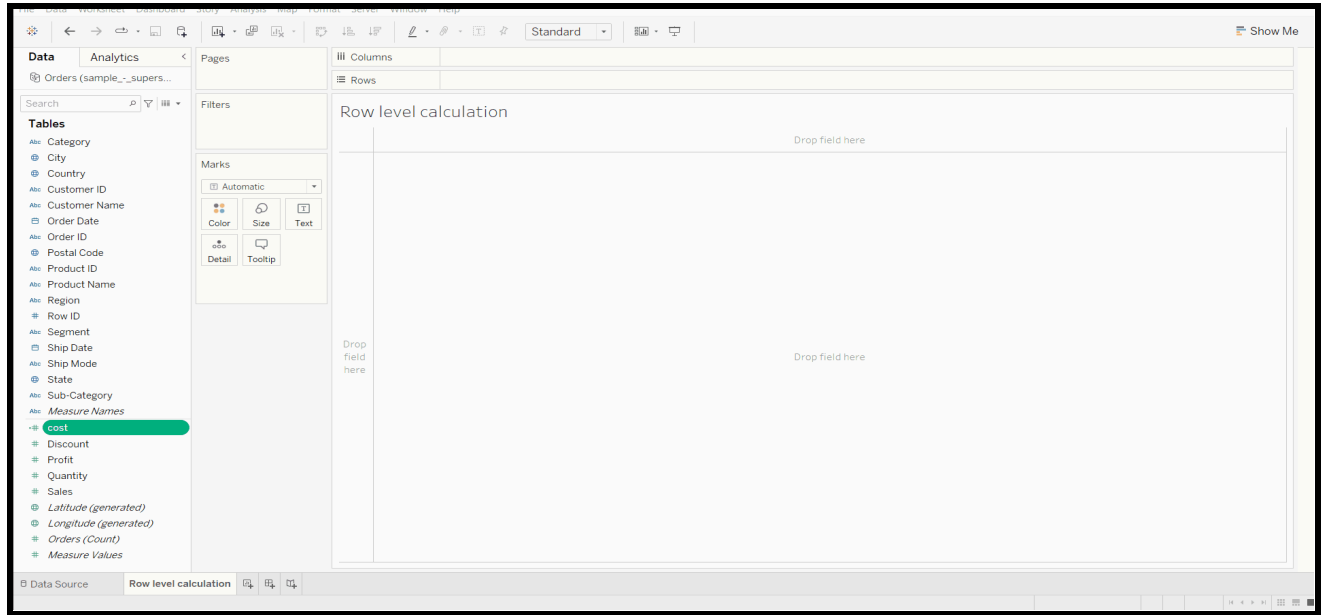
Business problem 10 -find average cost of each product sub categories

Creating a row level calculation it will calculate cost for each row in the dataset

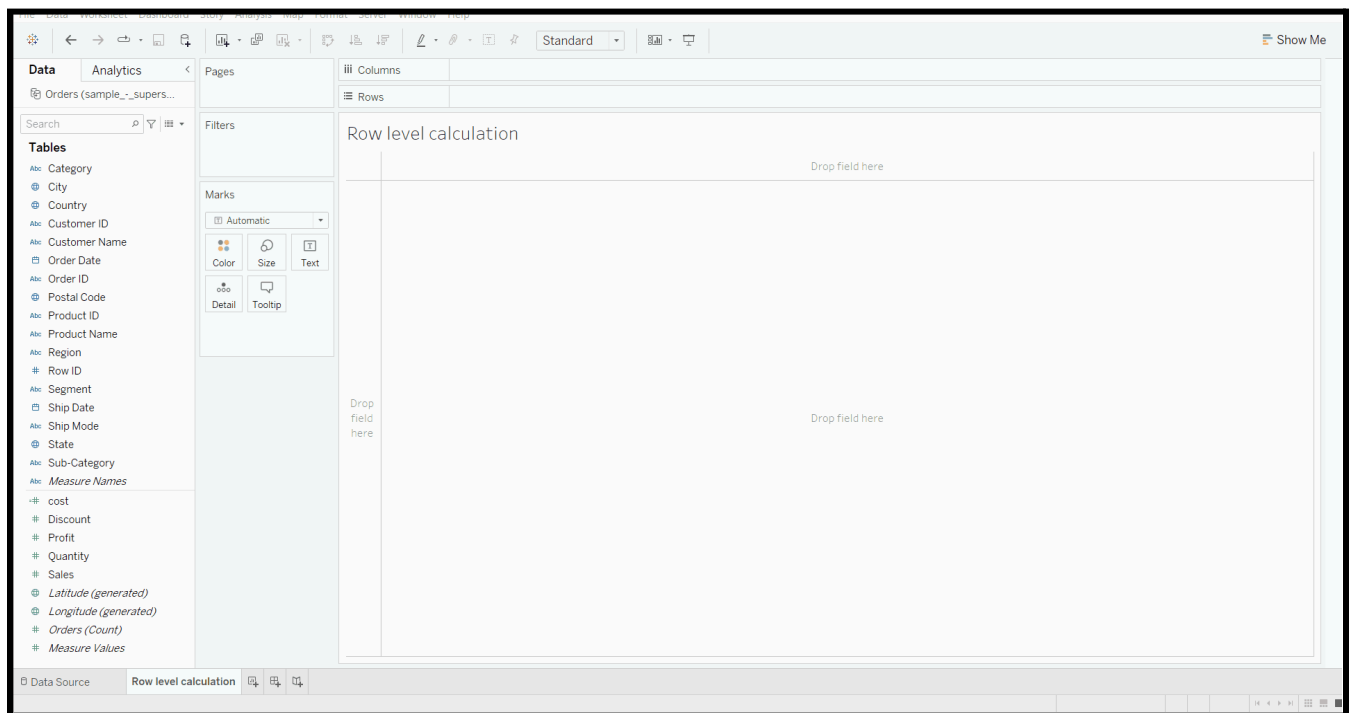
Calculation formula- **[Sales]-[Profit]**



Verifying that it is a row level calculation using view data



Solving the business problem

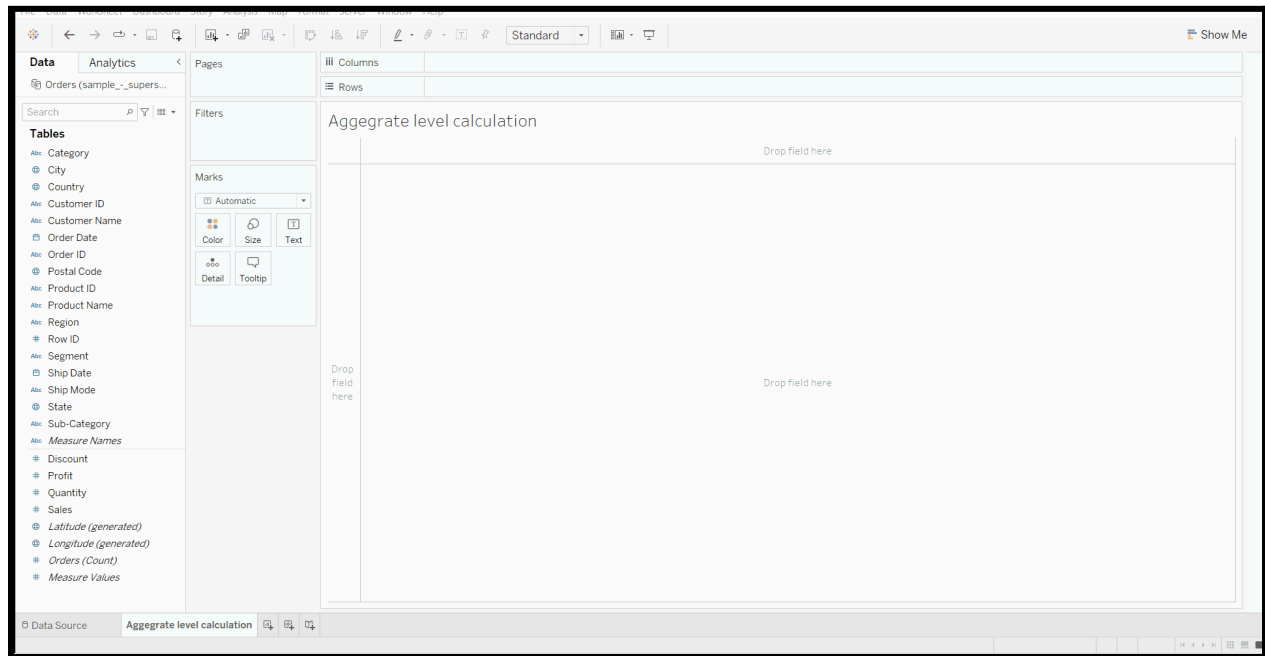


Aggregate level

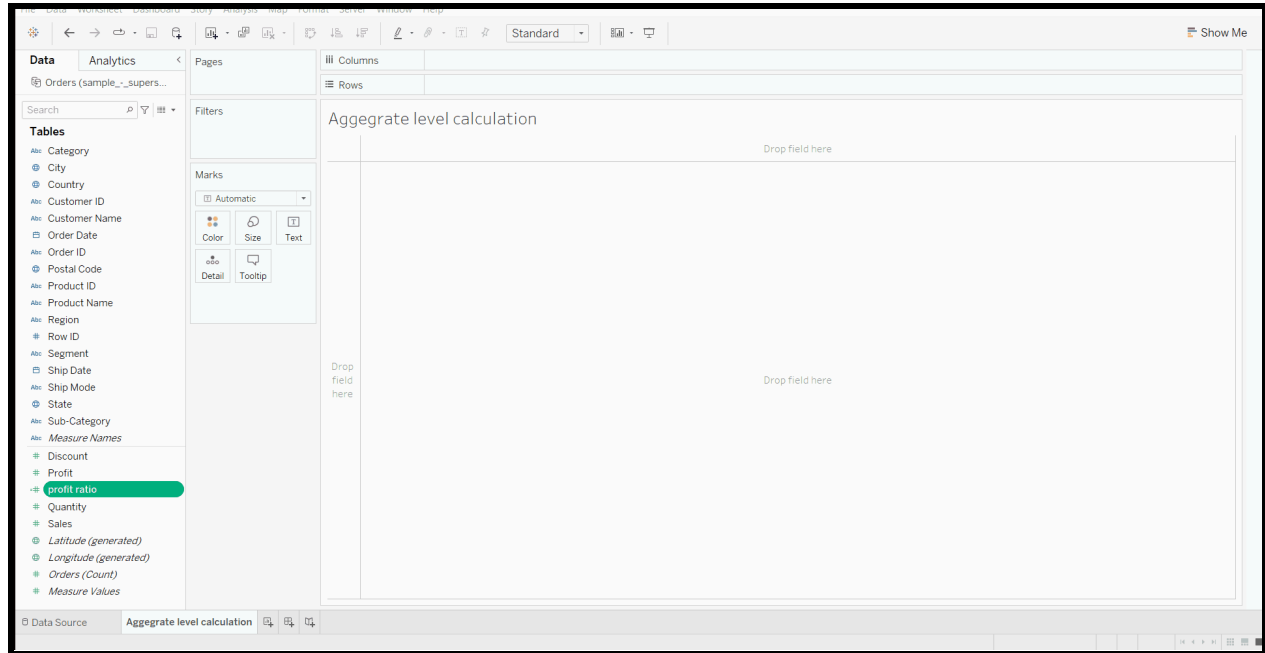
Business problem 11 - Find profit ratio of each product sub categories

Creating aggregate calculation (Notice we are using SUM aggregation in the calculation)

Calculation formula- $\text{SUM}([\text{Profit}]) / \text{SUM}([\text{Sales}])$



Solving the business problem



Note: Notice AGG in pill profit ratio [refer](#) here the SUM is performed 1st based on the dimension sub category (ie sum of profit and sum of sales for each sub category) and then the division occurs. Now if we change the dimension from sub category to category the calculation will be done based on it