

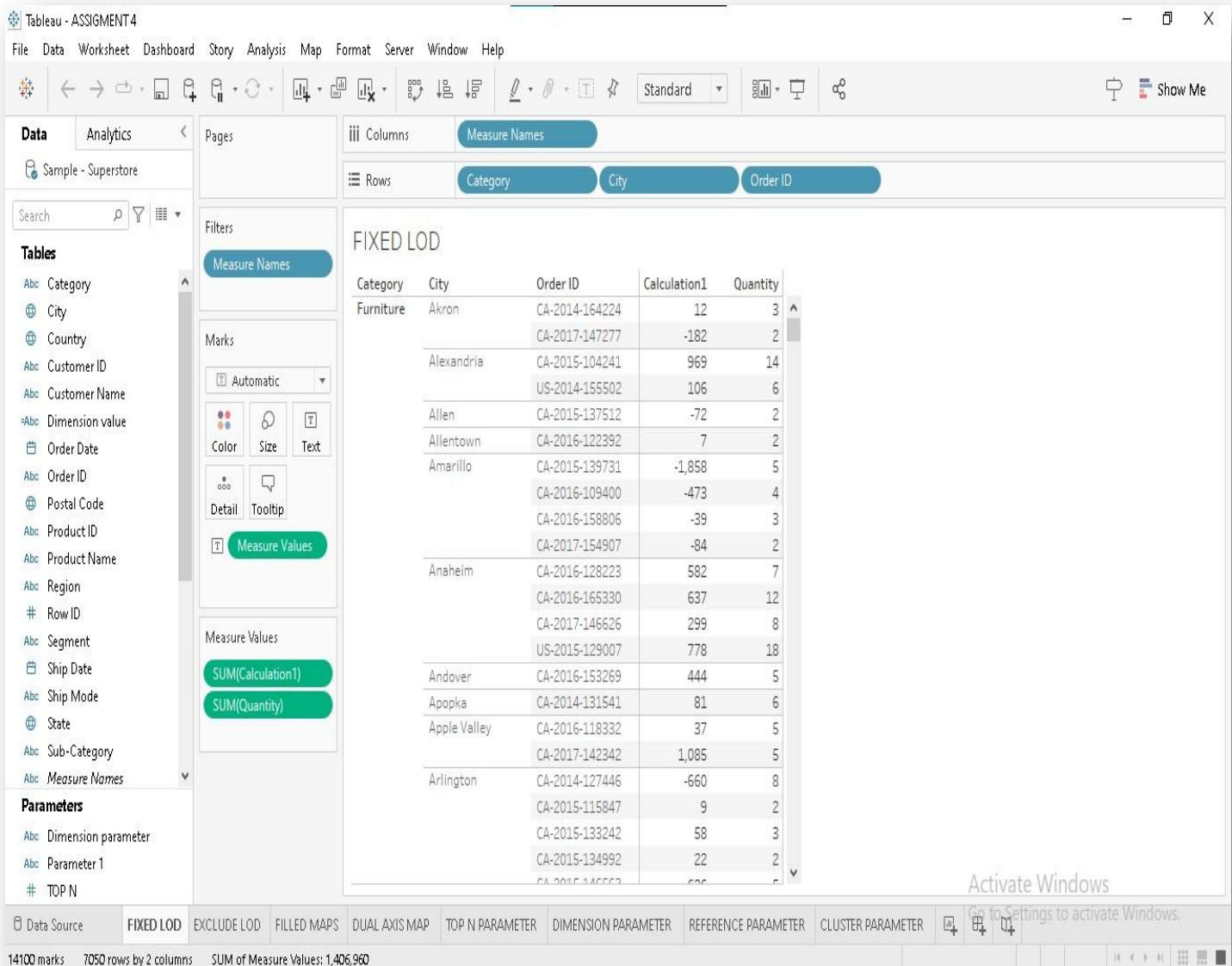
DATA ANALYTICS

ASSIGNMENT-4

TASK-1

FIXED LOD : This function allows users to define a fixed level of detail for a particular calculation, regardless of the level of detail in their view. Fixed LOD functions are useful when users need to perform calculations at a specific level of detail, such as at the customer or product level.

In below visualizations we can see that different data like measure names values are considered as the columns and similarly the different data like category, city and order id values are considered as the rows based on this values we can observe that a fixed column (Calculation 1) with measured values are obtained.



EXCLUDE LOD : These functions allow users to exclude specific fields from the calculation while still preserving the level of detail of the view. Exclude LOD functions are useful when users need to perform calculations that exclude specific fields but still need to preserve the level of detail in their view.

In below visualizations we can observe that excluded values to get the detailed view of sales compared to fixed lod we excluded the segments field from the rows.

We use category and product Id and city in rows and measured names in column.

Tableau - ASSIGNMENT 4

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Standard

Show Me

Data Analytics

Sample - Superstore

Search

Tables

- Category
- City
- Country
- Customer ID
- Customer Name
- Dimension value
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names

Parameters

- Dimension parameter
- Parameter 1
- TOP N

Columns: Measure Names

Rows: Product ID, City

Filters: Measure Names

Marks: Automatic

Color Size Text

Detail Tooltip

Measure Values

SUM(Calculation2)

SUM(Sales)

EXCLUDE LOD

Product ID	City	Calculation2	Sales
FUR-BO-10000112	Chicago	-97,238	825
FUR-BO-10000330	Lafayette	8,196	242
	San Diego	-1,990	411
	San Francisco	-1,990	411
FUR-BO-10000362	Los Angeles	7,948	291
	New York City	701	137
	Peoria	-12,881	359
	Providence	26,895	342
	Wilmington	242,059	1,026
FUR-BO-10000468	Jacksonville	-1,207	155
	Lafayette	3,398	146
	Lincoln Park	6,042	194
	Monroe	-301	78
	Parker	-18,605	102
	Seattle	378	49
FUR-BO-10000711	Detroit	12,243	213
	Jonesboro	110,185	639
FUR-BO-10000780	Dallas	-39,522	410
	Houston	-215,271	957
	Huntsville	-215,271	957
	New York City	-5,167	322
	Philadelphia	-61,699	301
FUR-BO-10001327	Columbia	12,173	300

18628 marks 9314 rows by 2 columns SUM of Measure Values: 767,140,546

Activate Windows

Go to Settings to activate Windows.

Task-2

Visualizing geographic information helps data consumers quickly and easily derive insights and meaning. Tableau is designed to make the most of geographical data, with instant geocoding, tableau automatically turns the location data. Map visualization is used to analyze and display the geographically related data and present in the forms of map.

In Task 2 we created different map visualizations using geographical data

They are :

1.Filled map

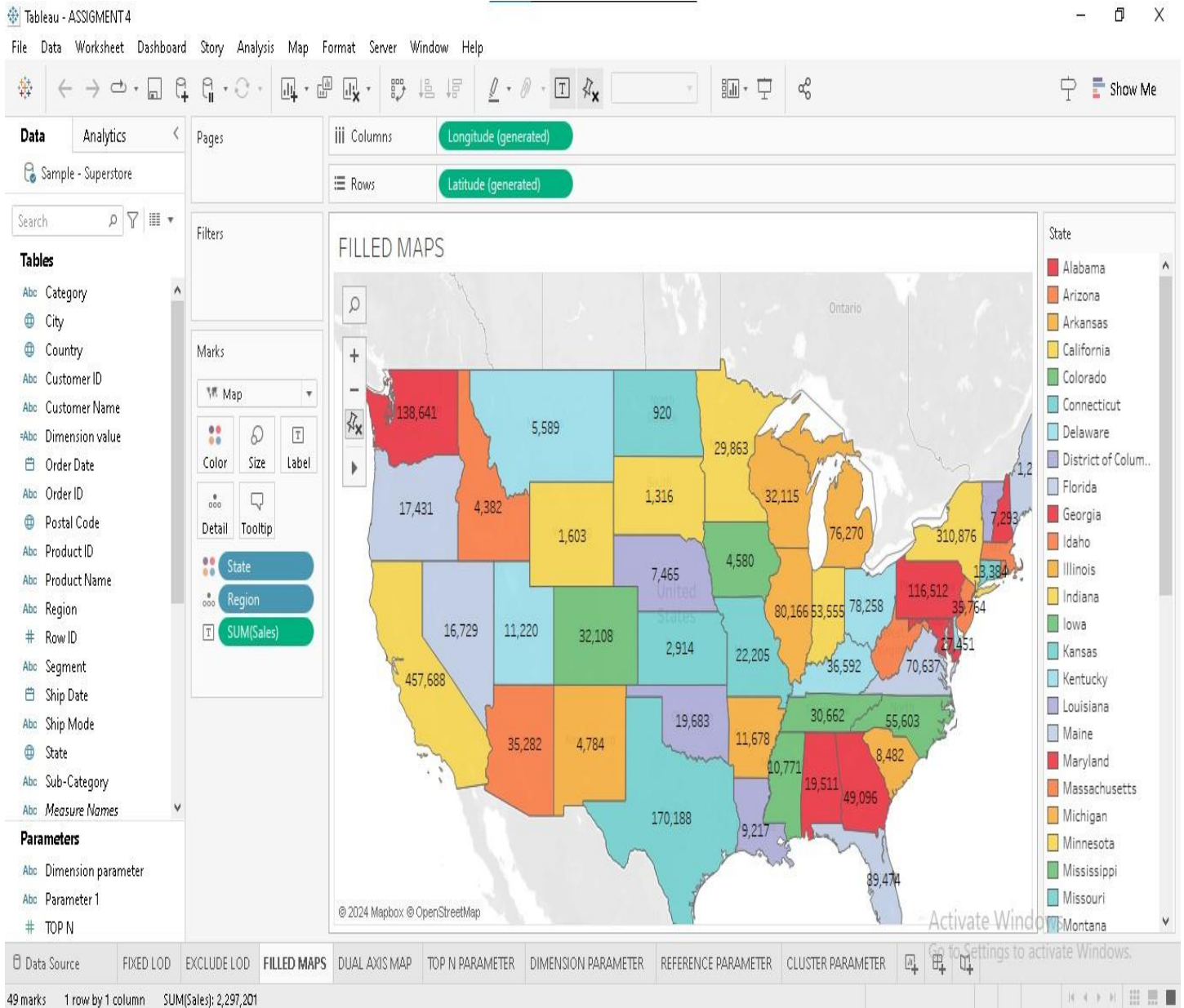
2. Dual Axis map

In this visualizations global super store data is used,

Filled Map : Filled map visualization is a method of graphically representing numerical data where the value of each data point is indicated using colors.

In this Filled map longitude value is taken in column field and latitude value is taken in row field then we get resultant Filled map. Here we can observe that the sales values are represented with different shades of colours respected to different areas.

Filled map

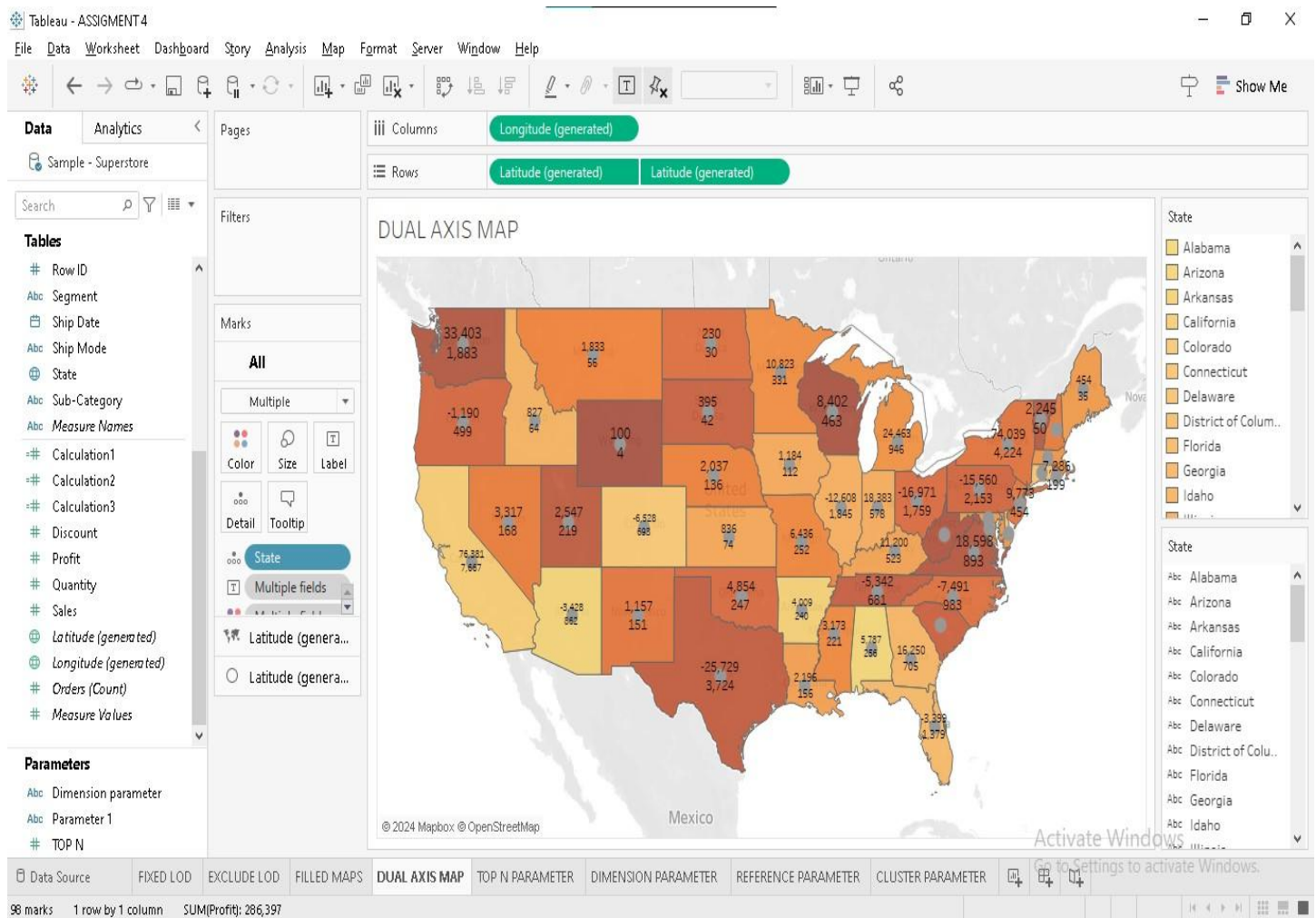


Dual Axis : Dual axis map is a map with two sets of geographical data overlaid on top of one another.

To create dual axis map we use longitude in column and latitude in row as well as multiple fields in colors, state field and country in detail then we get the resultant dual axis map.

With this dual axis layered map, users can easily tell which state generated more Profit and Quantity while at the same time tell the leading cities within those high performing states.

Dual Axis map

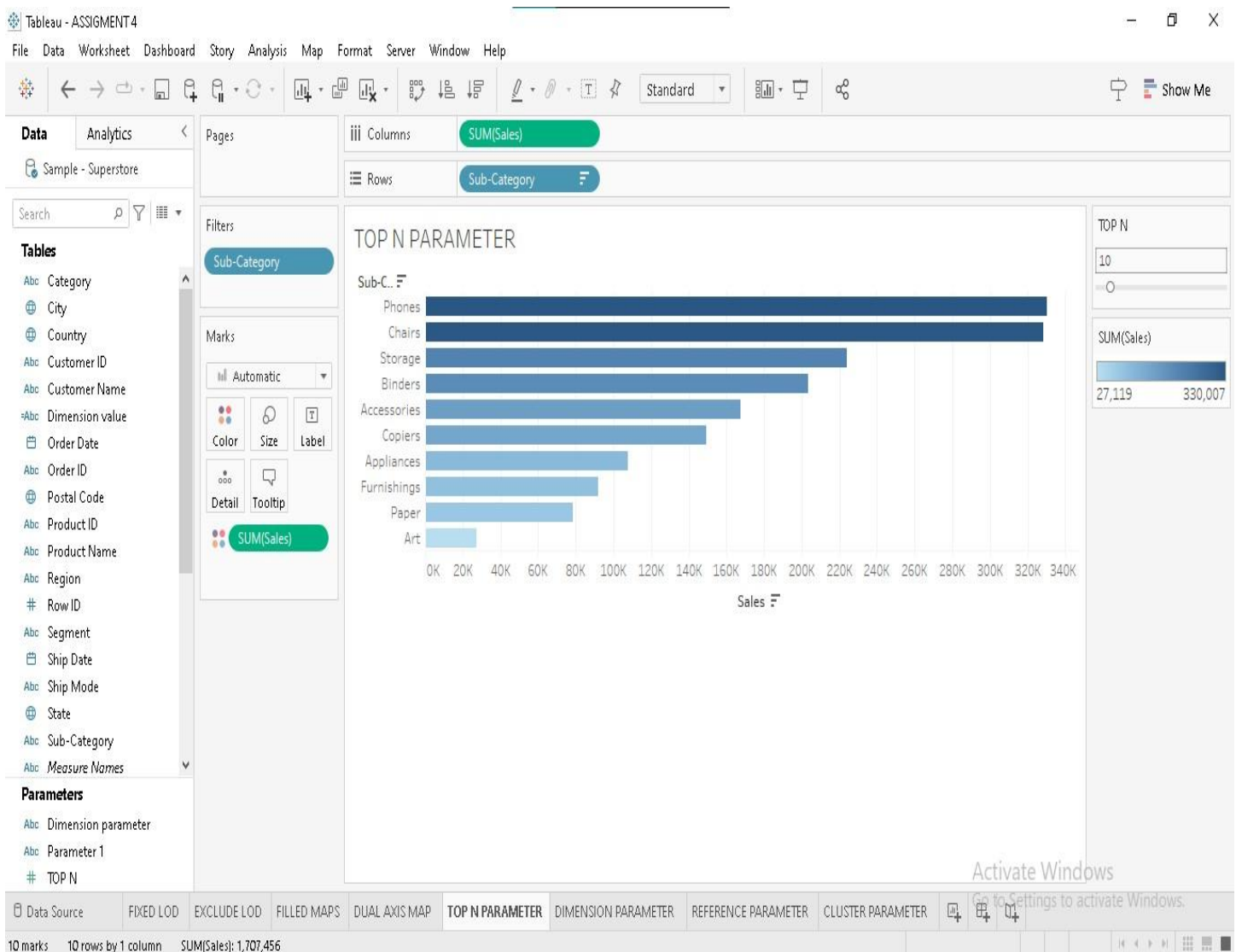


Task-3

Top N Parameter : A Top N parameter returns data according to a number you assign it, hence the N in the name.

In below visualization we can observe that the Top N parameter display the top 100 sub category values according to their sales. We used sum of sales in column field and sub category in rows field that we got the resultant visualization showing top 10 sub category values in a decending order.

Top N parameter



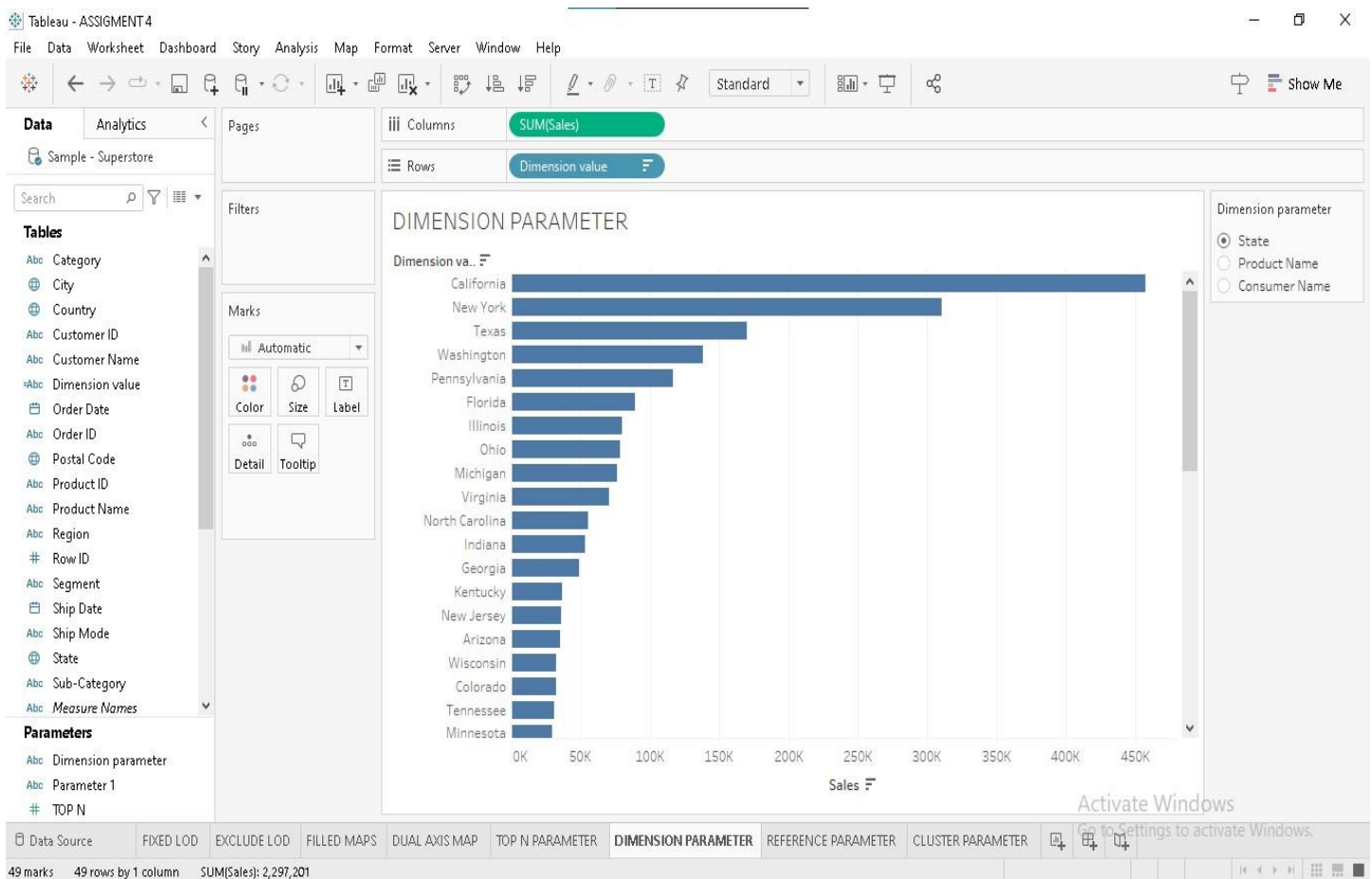
Dimensional Parameter : Dimensions contains qualitative values (such a names, dates or geographical data).

We can use dimensions to categorize, segment, and reveal the details in your data. Dimensions affect the level of detail in the view.

- Dimensions are categorical data fields that represent qualitative attributes.
- They provide context and structure to data, allowing users to segment, group, and categorize information for analysis.
- They are typically used on the rows and columns of a visualization, defining the axes of charts and graphs.

In below visualization we use sum of sales in column field and Dimension value (Calculation) in row field gives the resultant visualization shows the the sales of categorical values by performed calculation.

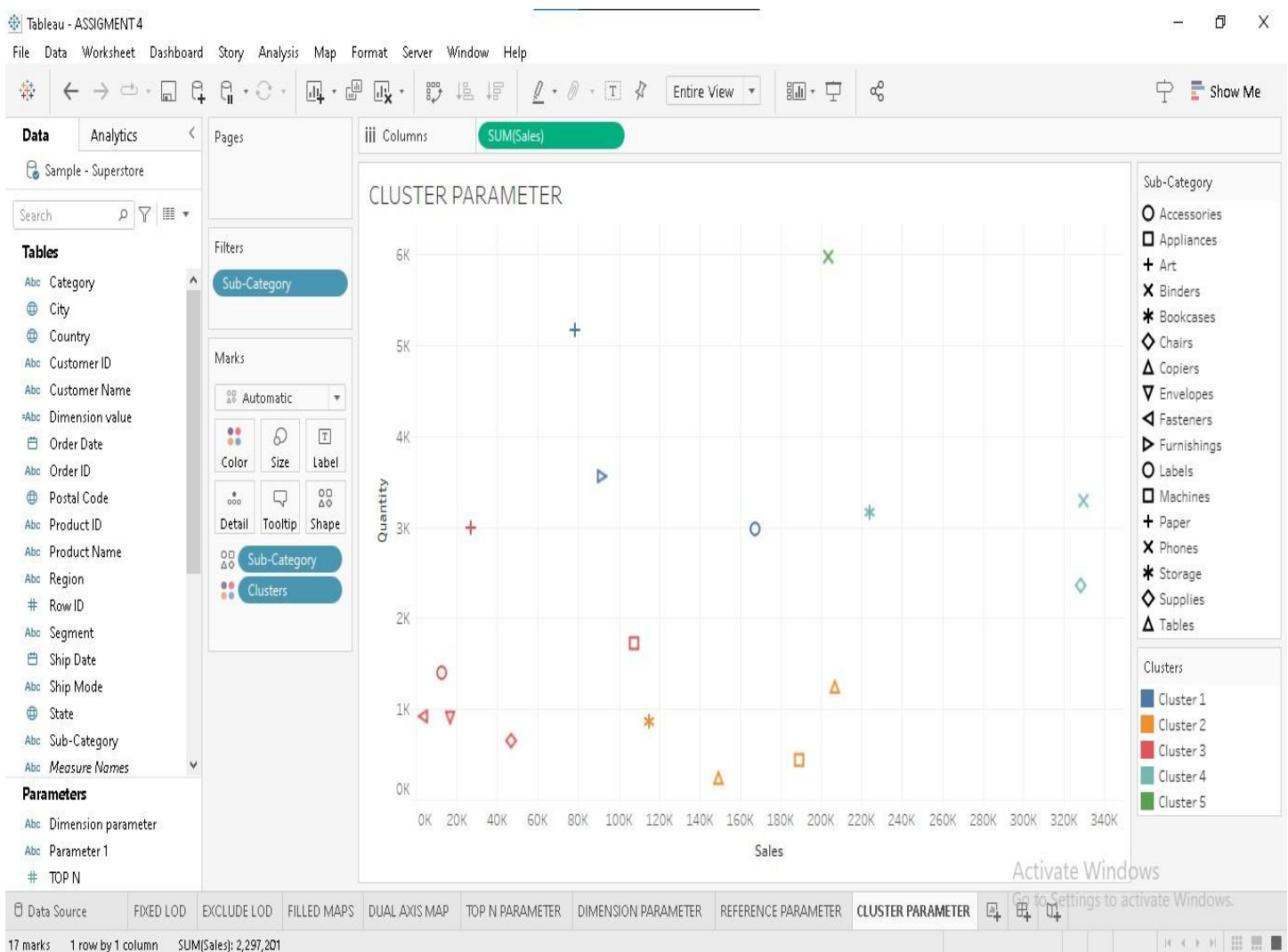
Dimension parameter



Cluster Parameter : Cluster parameter uses K-Means as the clustering algorithm and groups data based on the mean values of the cluster. Cluster Parameters allows you to group and find underlying trends in your data. However, the built-in cluster does so based on the dimensions in the view.

In below visualization we use sum of sales in column field and Quantity in row field gives the resultant visualization shows the sales of categorical values by performed cluster parameter underlying sub-category trends in data.

Cluster parameter



THANK YOU