

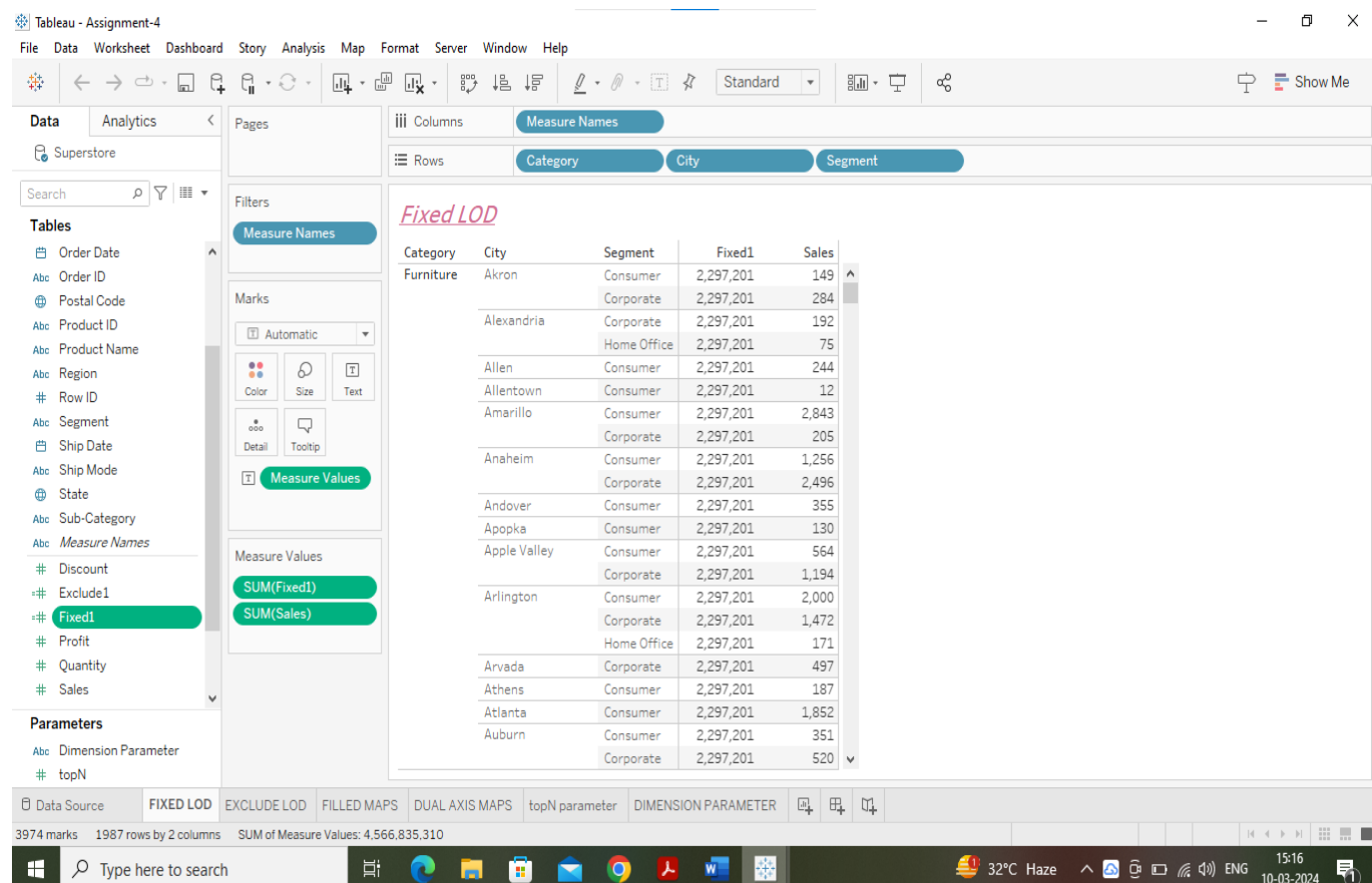
**DATA ANALYTICS WITH  
TABLEAU  
ASSIGNMENT-4**

## 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.

### EXPLANATION:

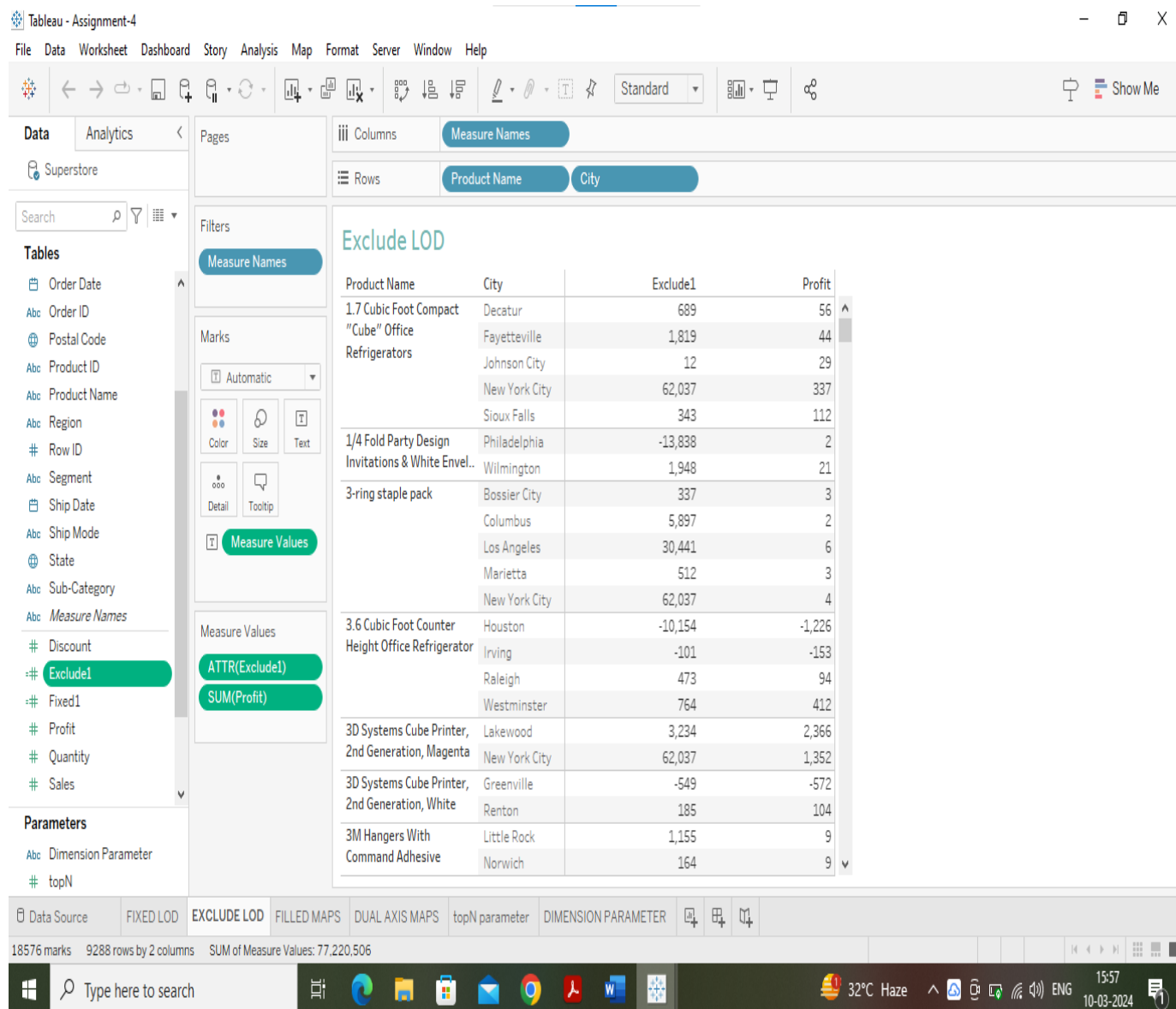
In below visualization we can see that different data like measure names are considered that as columns and similarly the different data like Category, City, and Segment are considered as the rows based on this values we can observe that a fixed column (Calculation 1) by using this code-({ FIXED : SUM([Sales])}) and 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.

## EXPLANATION:

In below visualization we can observe that excluded values to get the detailed view of profit compared to fixed Lod we excluded the segment field from rows. Here we considered Measure names as columns and similarly the different data like Product Name, and City are considered as rows. And Exclude (Calculation 1) by using this code- ({EXCLUDE [Product Name]: SUM([Profit])}).



## 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 analyse and display the geographically related data and present in the forms of map.

In Task 2 we created different map visualizations using geographical data.

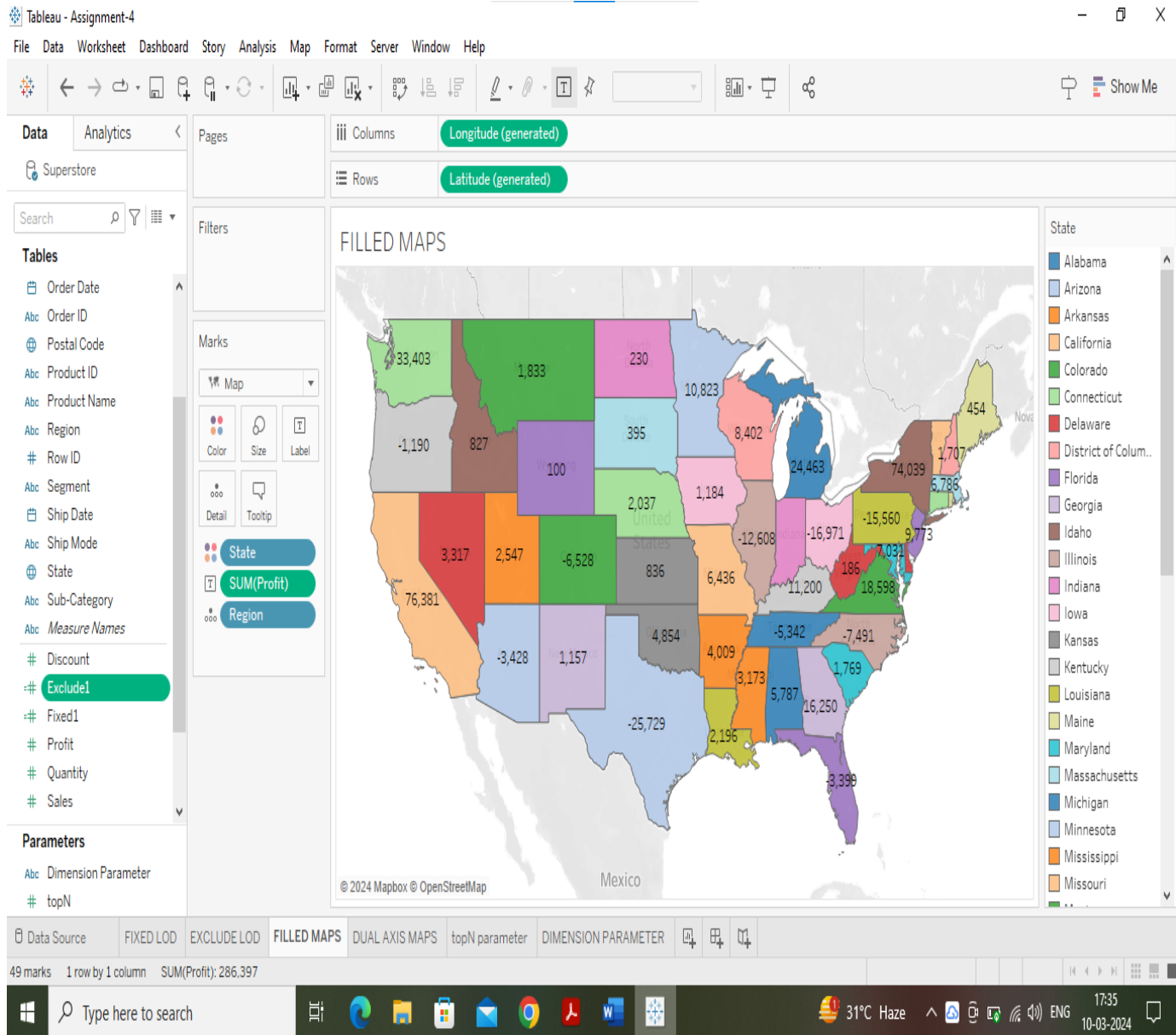
They are:

1. Filled Maps
2. Dual Axis Map

**FILLED MAPS:** Filled Map visualization is a method of graphically representing numerical data where the value of each data point is indicated using colours.

**EXPLANATION:** In this Filled Map I want to show that the profits of each state in UNITED STATES on map. 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 take region in detail for map. Here we can observe that the profit values are represented in different colours respected to different areas.

# FILLED MAP

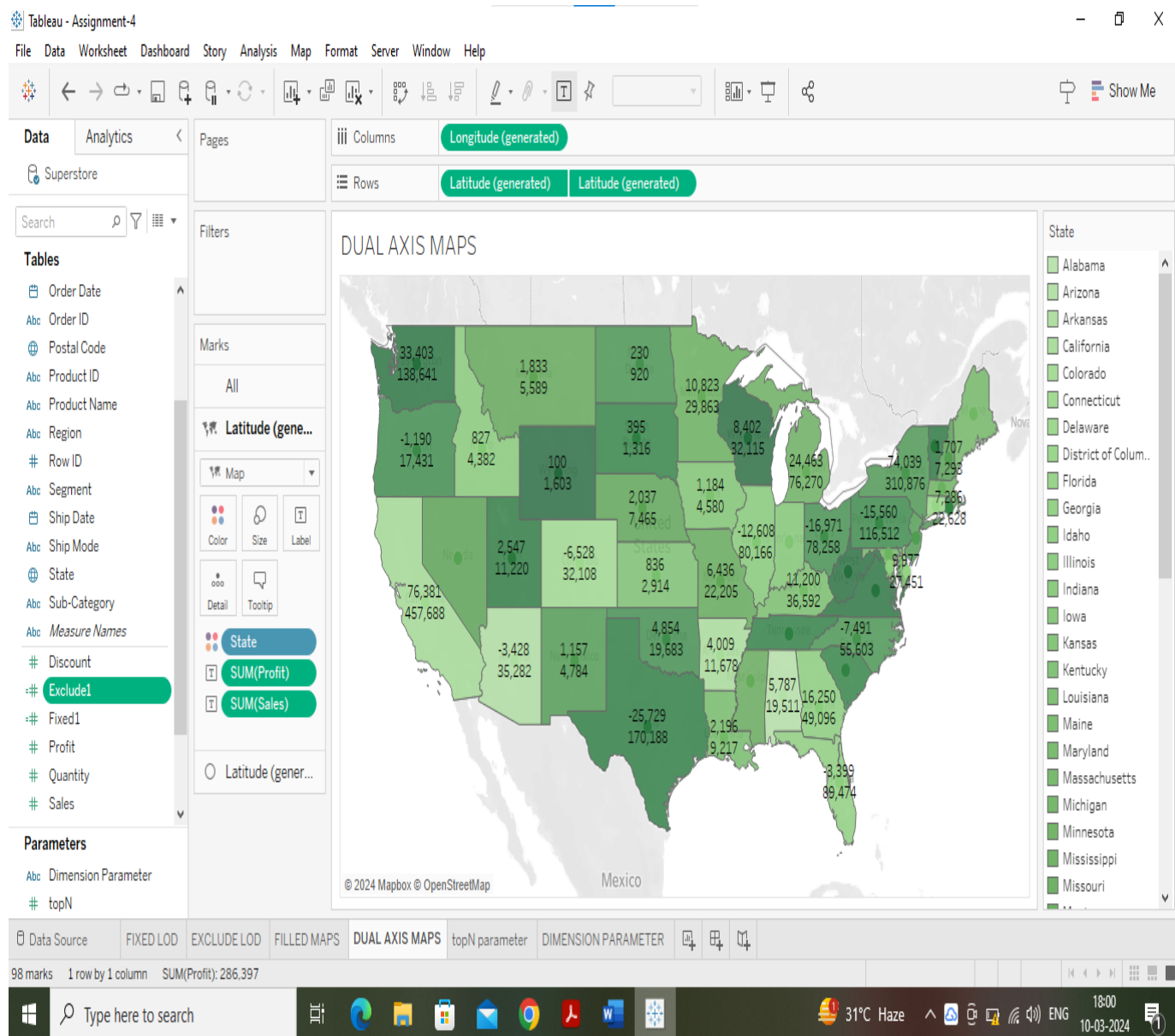


**DUAL AXIS MAP:** Dual axis map is a map with two sets of geographical data overlaid on top of one another.

**EXPLANATION:** In Dual Axis Map, I want to show the combination of profits and sales for each state. To create dual axis map we take longitude in column and latitude in rows as well as in multiple fields, we take state field in colours.

In rows we use two latitudes in that second latitude acts as dual axis in first latitude we take combination of profit and sales in label, so that we get resultant map that is dual axis map.

## DUAL AXIS MAP



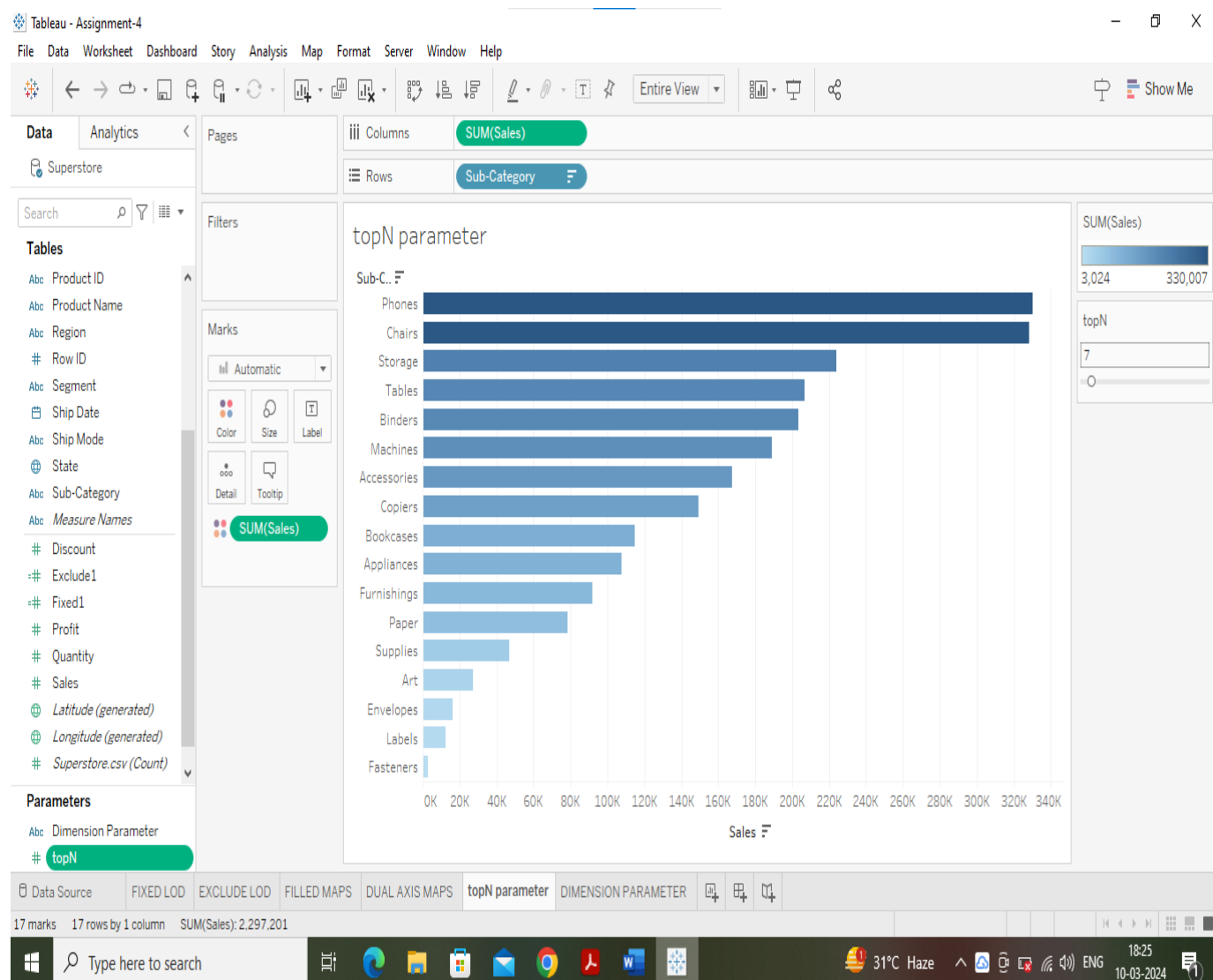
## TASK-3

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

**EXPLANATION:** In below visualization we can observe that the Top N Parameter display the top 100 sub category values according to their sales.

Here we take sum of sales in columns and sub category in rows field. Now we get bar graph type, so this will keep in descending order. Now we have to create top N parameter in that we have to give integer, minimum, maximum etc. parameter will be created. Now the resultant top N parameter will be shown below.

### Top N Parameter

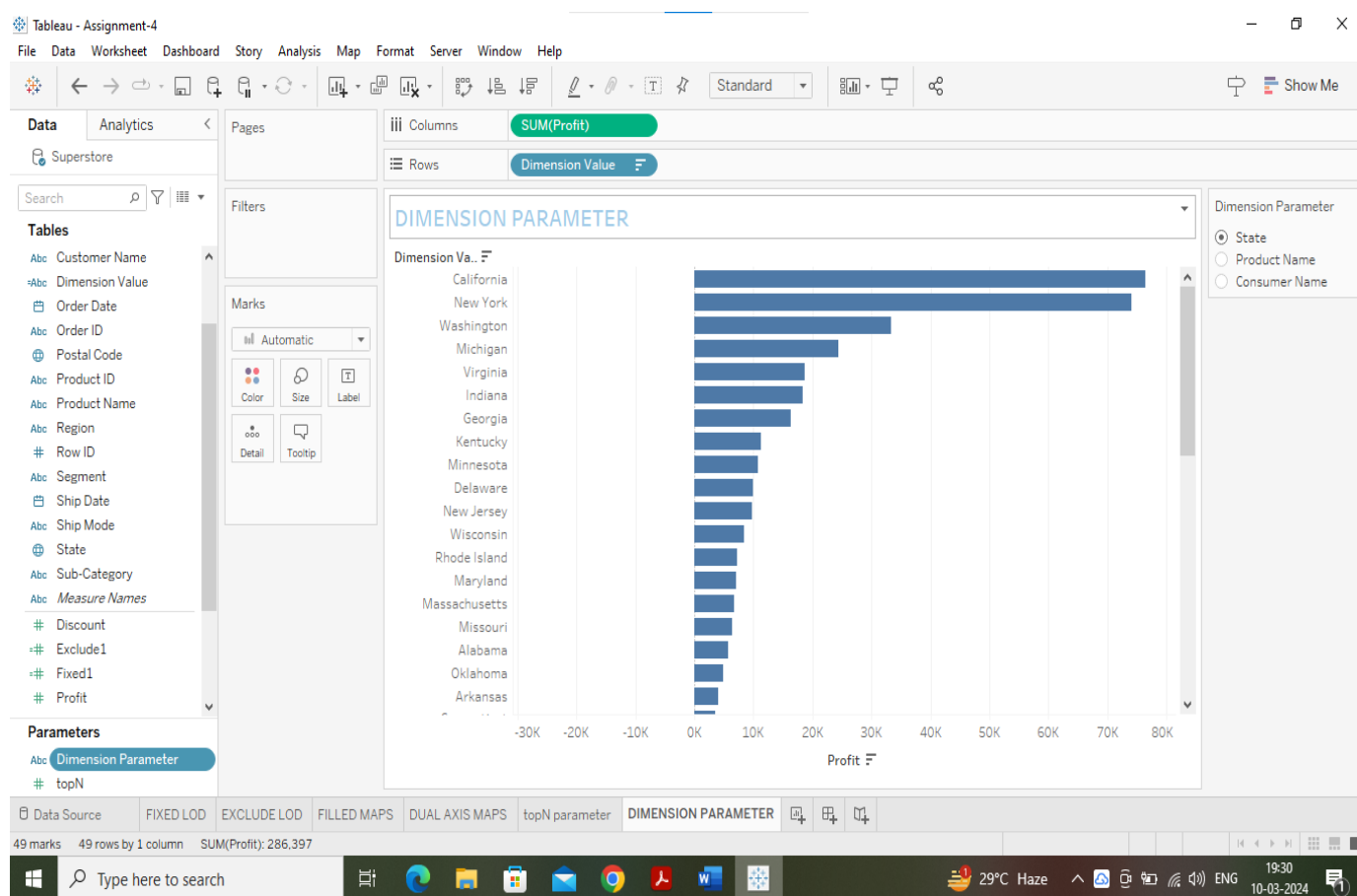


**DIMENSION PARAMETER:** Dimension contains qualitative values (such as names, dates or geographical data).

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

**EXPLANATION:** In below visualization we take sum of profit in column field and Dimension value in rows. First we have to create dimension value, so that we have to go to calculation field and then rename has dimension value and by using code: IF [Dimension Parameter] = 'State' THEN [State] ELSEIF [Dimension Parameter] = 'Product Name' THEN [Product Name] ELSEIF [Dimension Parameter] = 'Customer Name' THEN [Customer Name] END .

Now, we have to create dimension parameter in that, we have to give data type as string, current value as State and in List we have to add State, Product Name and Consumer Name, now show the parameter. This results the Dimension Parameter.





THANK YOU