DATA ANALYTICS WITH TABLEAU

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DATA SET: SAMPLE-SUPERSTORE.XLS

ASSIGNMENT-4

Task 1:- Create one fixed and one exclude LOD expression.
Task 2: Create any 2 map visualizations using geographical data.
Task 3: Create Top N and/or Dynamic dimension parameters and utilize those in your workbook.

Explain LOD Expression, Map Visualizations using geographical data and Top N, Dynamic dimension Parameters

LOD Expression: Level of Detail (LOD) expressions in Tableau allow you to perform complex queries involving multiple dimensions at the data source level, rather than bringing all the data into the Tableau interface.

Types of LOD Functions: There are three main types of LOD functions:

1. **Fixed**: These expressions compute values based on a fixed set of dimensions, regardless of the visualization context.
2. **Include**: Include LOD expressions allow you to specify dimensions to include in the computation, even when they are not part of the visualization.
3. **Exclude**: Exclude LOD expressions exclude specific dimensions from the computation, focusing on the remaining dimensions.

Map Visualization using Geographical Data: Tableau is a powerful tool for analyzing geographical data. It can automatically transform location data into interactive maps. Here are some key points:

- **Zoom Levels**: Tableau supports up to 16 zoom levels for detailed map exploration.
- To create a map visualization:
    1. Double-click on a geographical field in the data pane.
    2. Tableau will generate a map using the latitude and longitude fields.

Top N Parameter: The Top N parameter allows users to dynamically control the display of data. Here's how it works:

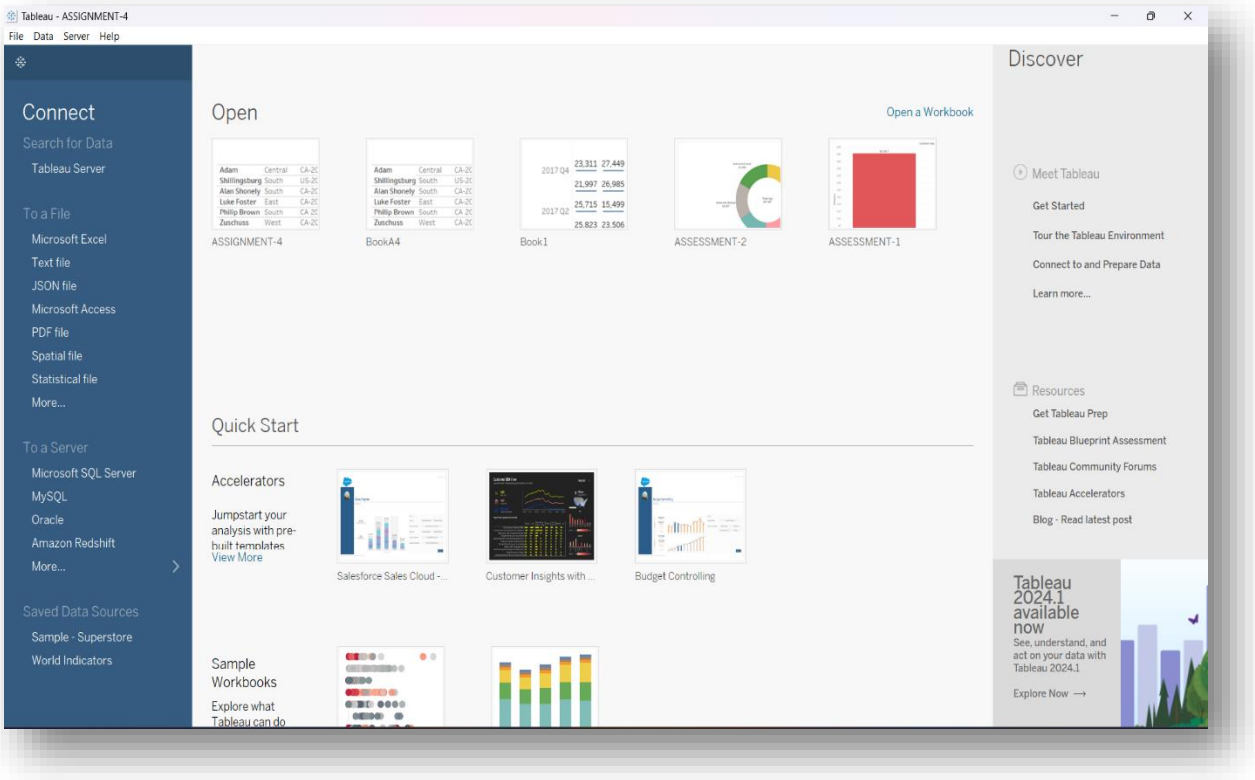
- Users select a value for N (where N represents the number of items to display).
- The parameter can be static or controlled by user input.
- It's also known as the Bottom N parameter, allowing users to filter and display a specific percentage of their data.

Dynamic Dimension Parameters: To create dynamic dimension parameters:

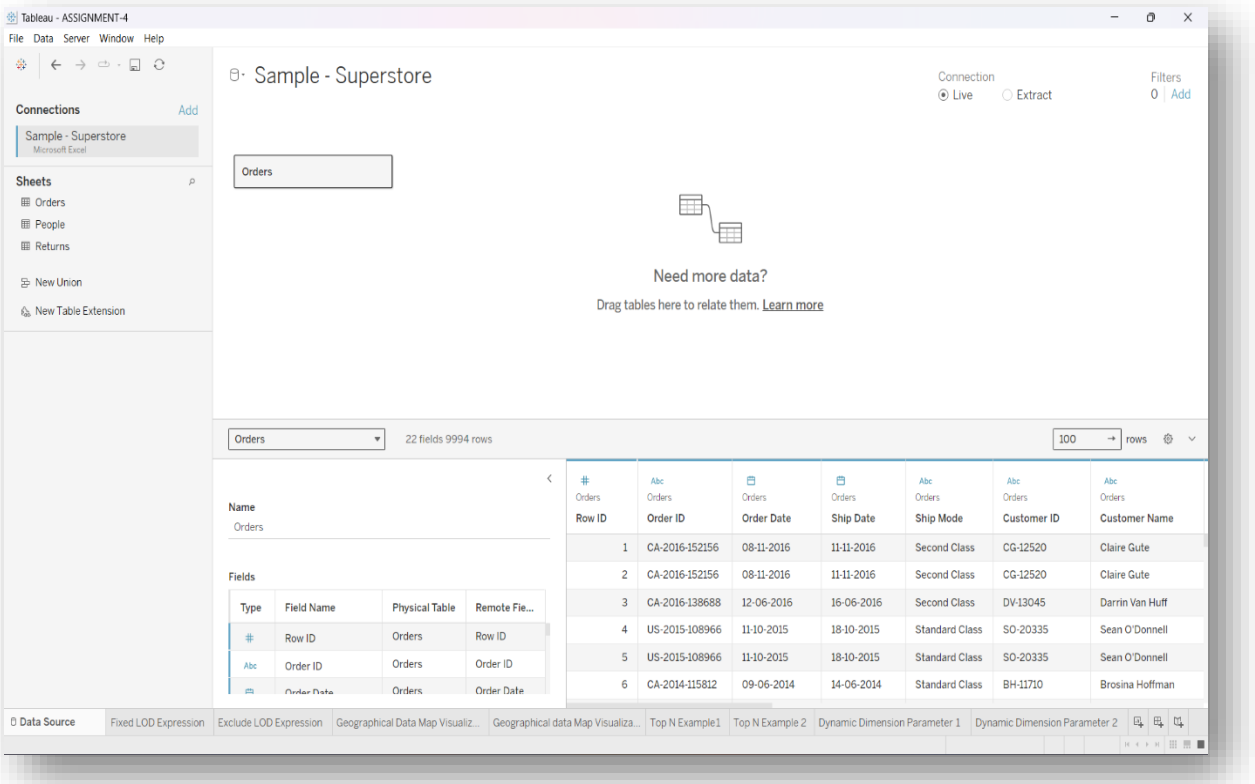
1. **Create a Parameter**: Define a new parameter that lists your dimensions.
2. **Calculated Field**: Create a calculated field that will serve as a dimension in your worksheet.
3. **Display Dimension**: Configure the calculated field to display when a particular parameter value is selected.
4. Add the calculated fields to your canvas, and use them in your visualizations.

We should consider using dynamic parameters for various purposes, such as color coding, filtering, or selecting specific ratings or price ranges.
We should also remember that clear and concise communication enhances the professional presentation of our insights in Tableau.

Tableau Starting:-

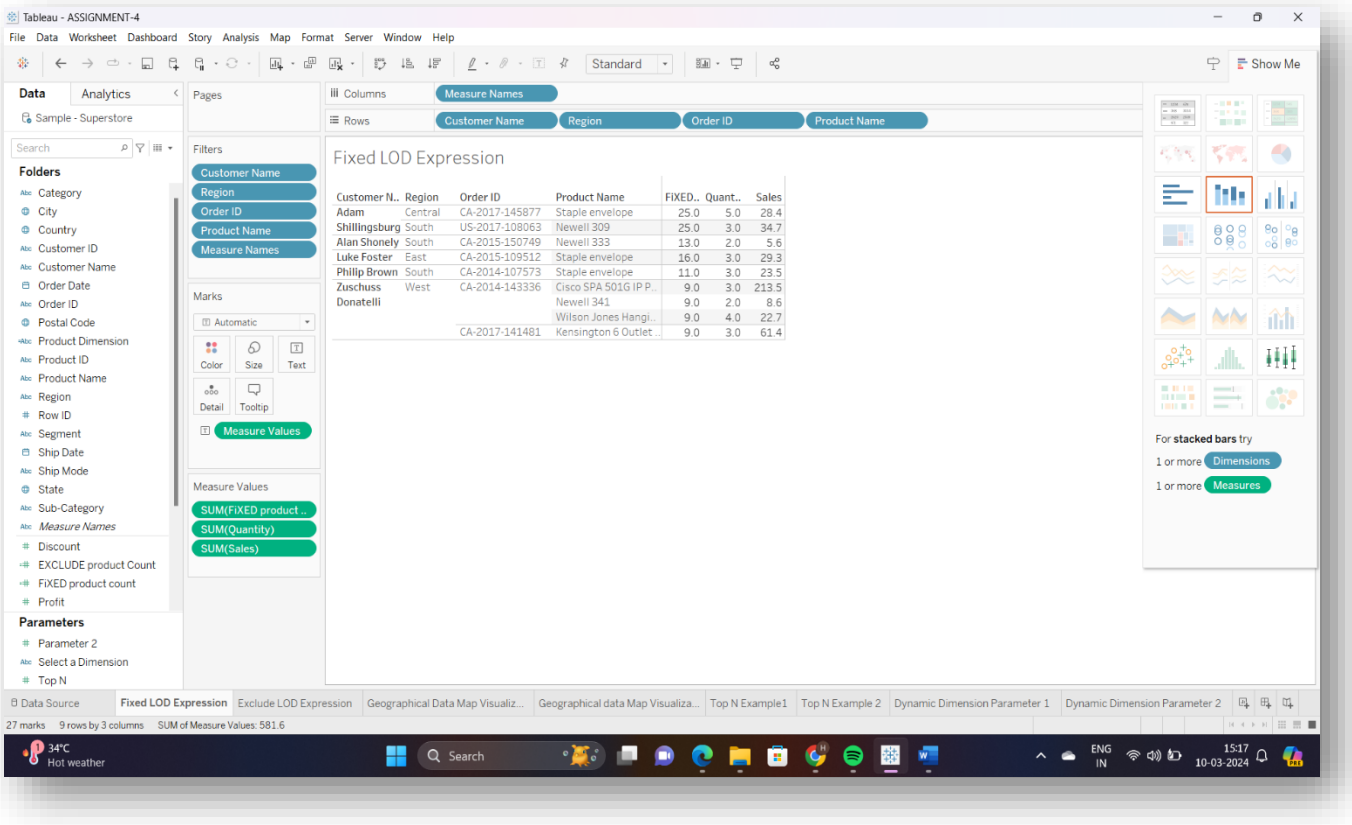


Upload the DataSet in Tableau:-

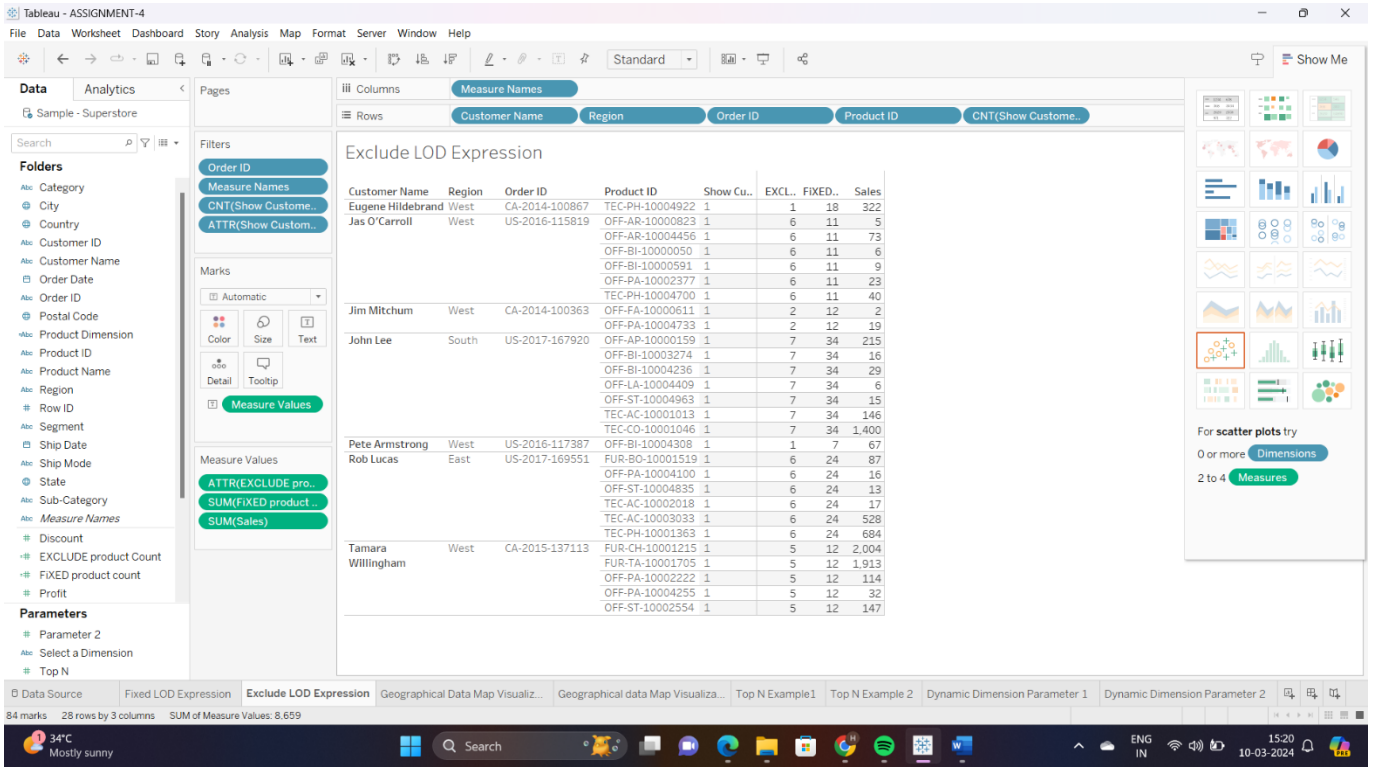


Create One Fixed LOD Expression and one exclude LOD expression:-

One Fixed LOD:-

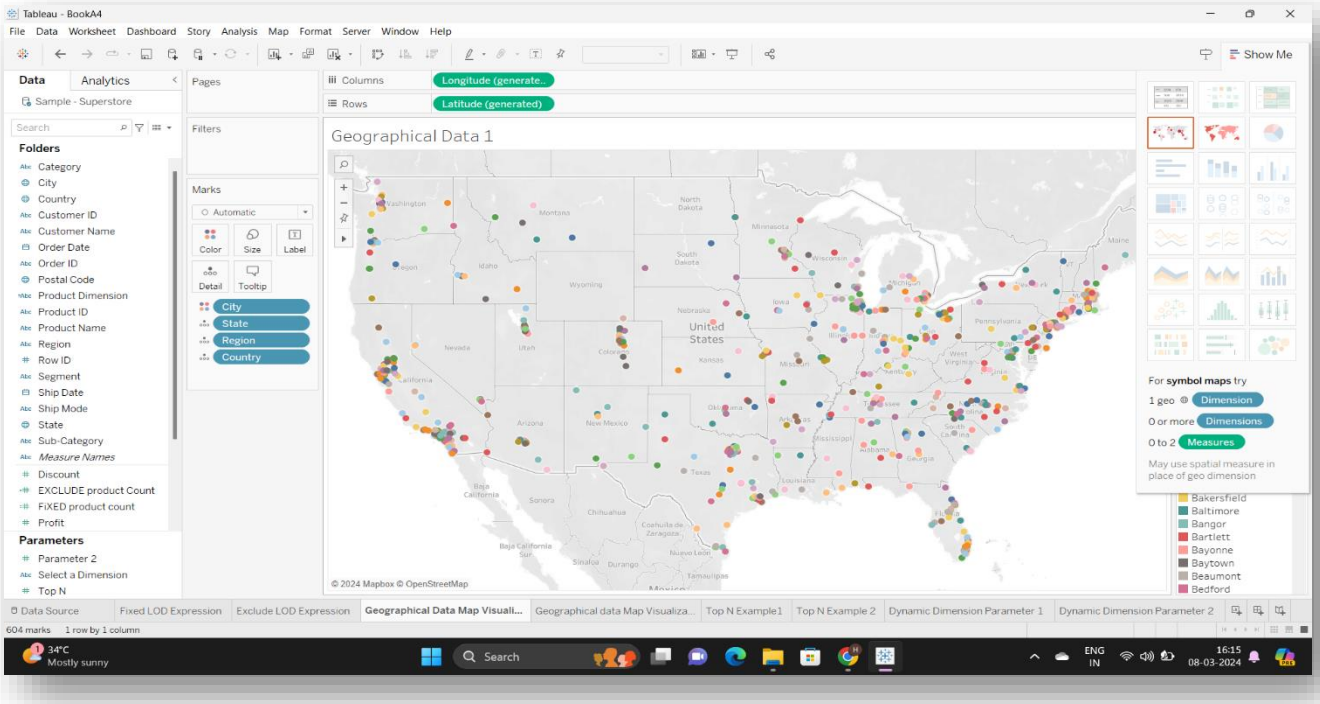


One Exclude LOD Expression:-

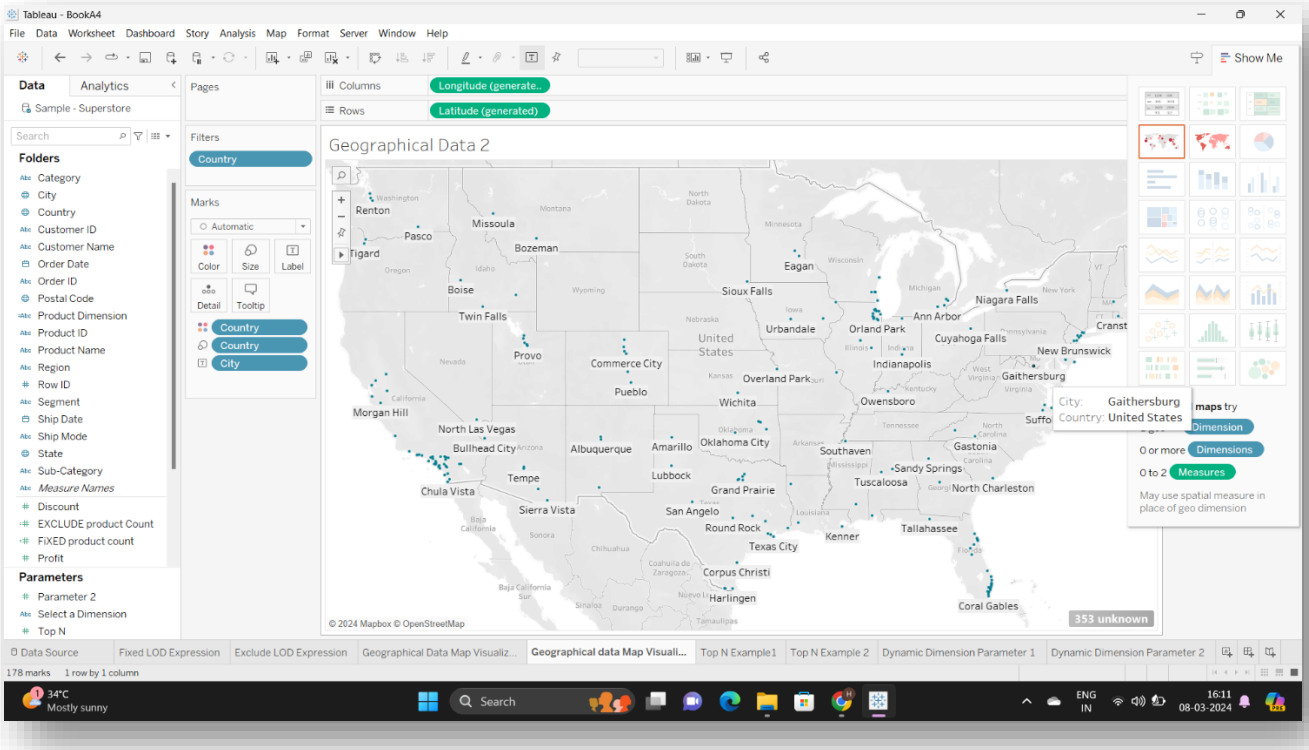


Create any 2 map visualizations using geographical data:-

Map visualization 1:-

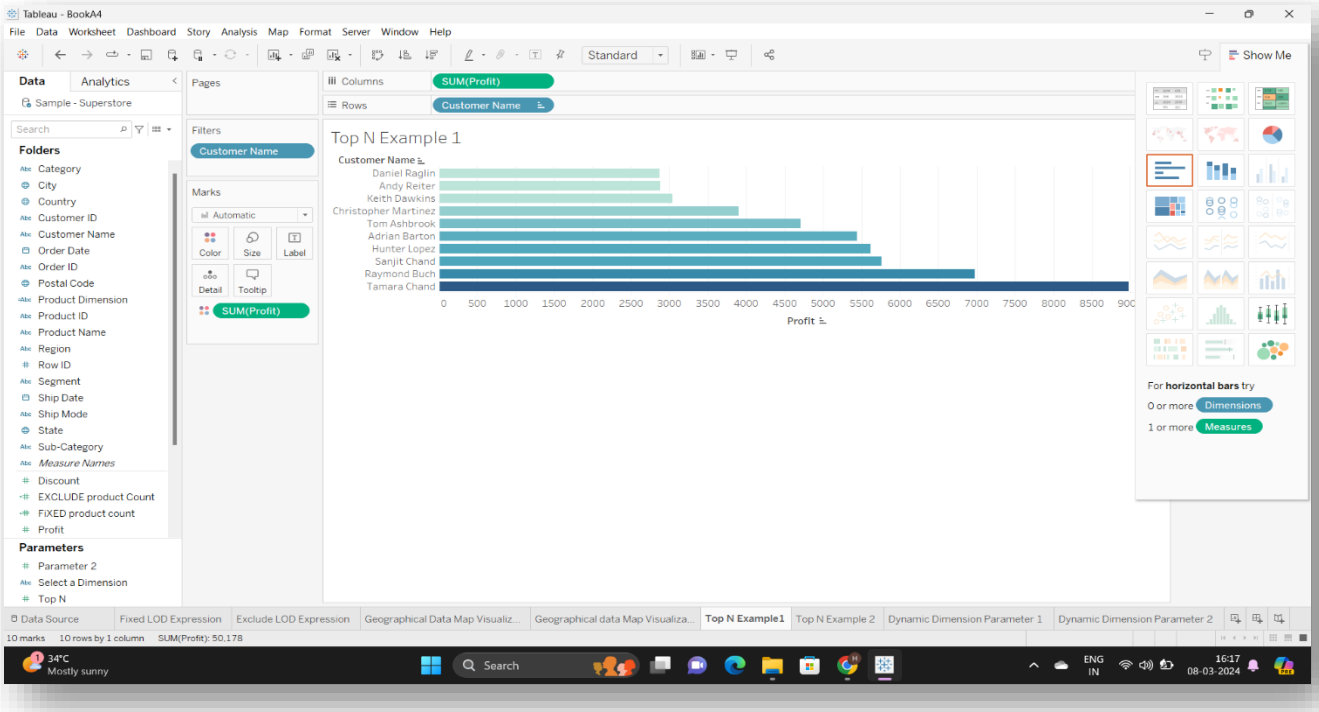


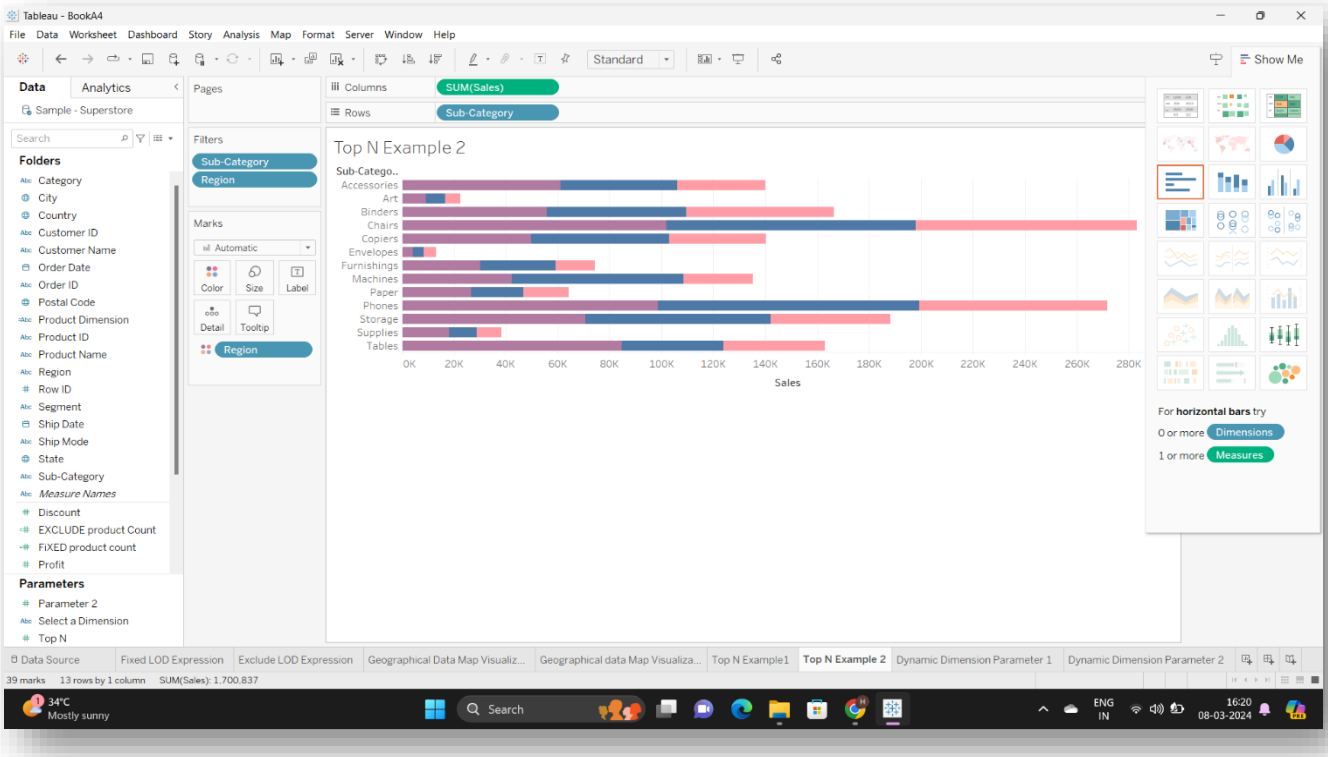
Map visualization 2:-



Create Top N and/or Dynamic dimension parameters and utilize those in your workbook:-

Top N Parameters:-





Dynamic Dimension Parameter 1:-