

DATA ANALYTICS WITH TABLEAU

ASSIGNMENT-4

BY:

Talluri Harika

20NN1A0550

VNITSW

Dataset:
SAMPLE-SUPERSTORE

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 are used to run complex queries involving many dimensions at the data source level instead of bringing all the data to Tableau interface.

Different types of LOD functions :-

There are three types LOD functions:-

- 1) Fixed
- 2) Include
- 3) Exclude

Map Visualization using geographical data :-

Tableau is a tool for analyzing geographical data. It can automatically turn location data into interactive maps.

Zoom Levels :- 16 In Map Visualization, Geographical fields are double click on the field the data pane and tableau will create a map using generated latitude and longitude fields.

Top N Parameter:- Top N parameter uses a value selected by the user, where N is a value. The value can be static or controlled by a parameter.

Top N parameter is also known as Bottom N

Tableau allows users to filter and display a certain percentage of their data

Dynamic Dimension Parameters:-

Create a Parameter. Create a new Parameter that lists your dimensions. Create a Calculated field that will be used as a dimension in your worksheet.

Dimension to display when a particular parameter value is selected.

Add the calculated fields to the canvas.

1) Colours 2) Filters 3) Select any ratings or price ranges.

Tableau starting:

Tableau - Book1

File Data Server Help

Connect

Search for Data

Tableau Server

To a File

- Microsoft Excel
- Text file
- JSON file
- Microsoft Access
- PDF file
- Spatial file
- Statistical file
- More...

To a Server

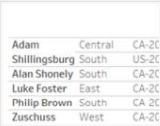
- Microsoft SQL Server
- MySQL
- Oracle
- Amazon Redshift
- More...

Saved Data Sources

- Sample - Superstore
- World Indicators


Open

[Open a Workbook](#)




assignment14

Adam	Central	CA-2C
Shillingsburg	South	US-2C
Alan Shonely	South	CA-2C
Luke Foster	East	CA-2C
Philip Brown	South	CA-2C
Zuschuss	West	CA-2C



assignment2-(Data An...




assignment1(da)


Quick Start

Accelerators


Jumpstart your analysis with pre-built templates [View More](#)



Salesforce Sales Cloud - ...



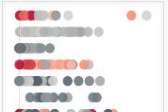
Customer Insights with ...

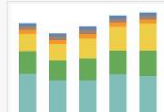


Budget Controlling

Sample Workbooks

Explore what Tableau can do





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- [Blog - Read latest post](#)

Tableau 2024.1 available now

See, understand, and act on your data with Tableau 2024.1

[Explore Now](#)



Upload the dataset in Tableau:

Tableau - BookA4[1] [Read-Only]

File Data Server Window Help

Connections [Add](#)

- Sample - Superstore
Microsoft Excel

Sheets [p](#)

- Orders
- People
- Returns
- New Union
- New Table Extension

Sample - Superstore

Connection ☒ Live ☐ Extract

Filters 0 [Add](#)

Orders

Need more data?
Drag tables here to relate them. [Learn more](#)

Orders 22 fields 9994 rows 100 rows

Name	Orders
Row ID	Order ID
Order Date	Order Date

Type	Field Name	Physical Table	Remote Fie...
#	Row ID	Orders	Row ID
Abc	Order ID	Orders	Order ID
Calendar	Order Date	Orders	Order Date

#	Abc	Calendar	Calendar	Abc	Abc	Abc
Orders	Orders	Orders	Orders	Orders	Orders	Orders
Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	Customer Name
1	CA-2016-152156	11/8/2016	11/11/2016	Second Class	CG-12520	Claire Gute
2	CA-2016-152156	11/8/2016	11/11/2016	Second Class	CG-12520	Claire Gute
3	CA-2016-138688	6/12/2016	6/16/2016	Second Class	DV-13045	Darrin Van Huff
4	US-2015-108966	10/11/2015	10/18/2015	Standard Class	SO-20335	Sean O'Donnell
5	US-2015-108966	10/11/2015	10/18/2015	Standard Class	SO-20335	Sean O'Donnell
6	CA-2014-115812	6/9/2014	6/14/2014	Standard Class	BH-11710	Brosina Hoffman

Data Source Fixed LOD Expression Exclude LOD Expression Geographical Data Map Visualiza... Geographical data Map Visualiza... Top N Example1 Top N Example 2 Dynamic Dimension Parameter 1 Dynamic Dimension Parameter 2

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

Tableau - BookA4[1] [Read-Only]

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Standard

Data Analytics

Sample - Superstore

Search

Folders

- Category
- City
- Country
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product Dimension
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names
- Discount
- EXCLUDE product Count
- FIXED product count
- Profit

Parameters

- Parameter 2
- Select a Dimension
- Top N

Pages

Filters

- Customer Name
- Region
- Order ID
- Product Name
- Measure Names

Marks

Automatic

Color Size Text

Detail Tooltip

Measure Values

- SUM(FIXED product ..
- SUM(Quantity)
- SUM(Sales)

Columns

Measure Names

Rows

Customer Name Region Order ID Product Name

Fixed LOD Expression

Customer N..	Region	Order ID	Product Name	FIXED..	Quant..	Sales
Adam	Central	CA-2017-145877	Staple envelope	25.0	5.0	28.4
Shillingsburg	South	US-2017-108063	Newell 309	25.0	3.0	34.7
Alan Shonely	South	CA-2015-150749	Newell 333	13.0	2.0	5.6
Luke Foster	East	CA-2015-109512	Staple envelope	16.0	3.0	29.3
Philip Brown	South	CA-2014-107573	Staple envelope	11.0	3.0	23.5
Zuschuss	West	CA-2014-143336	Cisco SPA 501G IP P..	9.0	3.0	213.5
Donatelli			Newell 341	9.0	2.0	8.6
			Wilson Jones Hangi..	9.0	4.0	22.7
		CA-2017-141481	Kensington 6 Outlet ..	9.0	3.0	61.4

Data Guide

Fixed LOD Expression

Viz Details

Viz description

Enter a description that helps users understand this viz

Additional resources

+ Add link

Accessibility

Edit alt text

Applied Filters

Data in This Viz

Sample - Superstore

- Customer Name
- Measure Names
- Order ID
- Product Name
- Region
- Measure Values

Data Summary

Detected Outliers

Data Source

Fixed LOD Expression

Exclude LOD Expression

Geographical Data Map Visualiz...

Geographical data Map Visualiza...

Top N Example1

Top N Example 2

Dynamic Dimension Parameter 1

Dynamic Dimension Parameter 2

27 marks 9 rows by 3 columns SUM of Measure Values: 581.6

One Exclude LOD Expression:

Tableau - BookA4[1] [Read-Only]

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Search

Data Analytics

Sample - Superstore

Folders

- Category
- City
- Country
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product Dimension
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names
- Discount
- EXCLUDE product Count
- FIXED product count
- Profit

Parameters

- Parameter 2
- Select a Dimension
- Top N

Filters

- Order ID
- Measure Names
- CNT(Show Custom...)
- ATTR(Show Custom...)

Marks

Automatic

Color Size Text

Detail Tooltip

Measure Values

- ATTR(EXCLUDE pro...)
- SUM(FIXED product ..)
- SUM(Sales)

Columns Measure Names

Rows Customer Name Region Order ID Product ID CNT(Show Custom...)

Exclude LOD Expression

Customer Name	Region	Order ID	Product ID	Show Cu..	EXCL..	FIXED..	Sales
Eugene Hildebrand	West	CA-2014-100867	TEC-PH-10004922	1	1	18	322
Jas O'Carroll	West	US-2016-115819	OFF-AR-10000823	1	6	11	5
			OFF-AR-10004456	1	6	11	73
			OFF-BI-10000050	1	6	11	6
			OFF-BI-10000591	1	6	11	9
			OFF-PA-10002377	1	6	11	23
			TEC-PH-10004700	1	6	11	40
Jim Mitchum	West	CA-2014-100363	OFF-FA-10000611	1	2	12	2
			OFF-PA-10004733	1	2	12	19
John Lee	South	US-2017-167920	OFF-AP-10000159	1	7	34	215
			OFF-BI-10003274	1	7	34	16
			OFF-BI-10004236	1	7	34	29
			OFF-LA-10004409	1	7	34	6
			OFF-ST-10004963	1	7	34	15
			TEC-AC-10001013	1	7	34	146
			TEC-CO-10001046	1	7	34	1,400
Pete Armstrong	West	US-2016-117387	OFF-BI-10004308	1	1	7	67
Rob Lucas	East	US-2017-169551	FUR-BO-10001519	1	6	24	87
			OFF-PA-10004100	1	6	24	16
			OFF-ST-10004835	1	6	24	13
			TEC-AC-10002018	1	6	24	17
			TEC-AC-10003033	1	6	24	528
			TEC-PH-10001363	1	6	24	684
Tamara Willingham	West	CA-2015-137113	FUR-CH-10001215	1	5	12	2,004
			FUR-TA-10001705	1	5	12	1,913
			OFF-PA-10002222	1	5	12	114
			OFF-PA-10004255	1	5	12	32
			OFF-ST-10002554	1	5	12	147

Data Guide

Exclude LOD Expression

Viz Details

Viz description

Enter a description that helps users understand this viz

Additional resources

+ Add link

Accessibility

Edit alt text

Applied Filters

Data in This Viz

- Sample - Superstore
 - Customer Name
 - Measure Names
 - Order ID
 - Product ID
 - Region
 - Measure Values
 - Show Customer

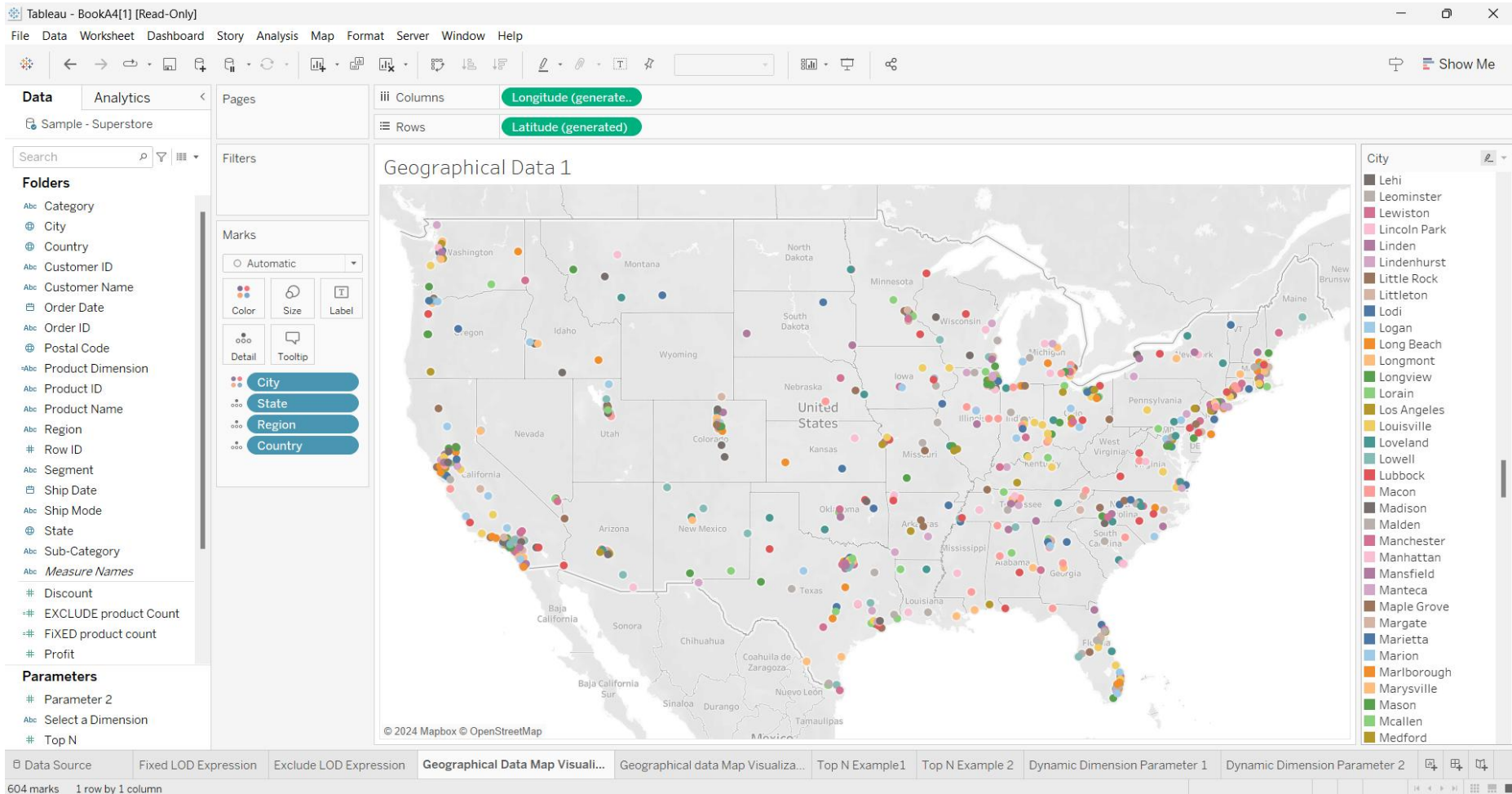
Data Summary

Data Source Fixed LOD Expression **Exclude LOD Expression** Geographical Data Map Visualiz... Geographical data Map Visualiza... Top N Example1 Top N Example 2 Dynamic Dimension Parameter 1 Dynamic Dimension Parameter 2

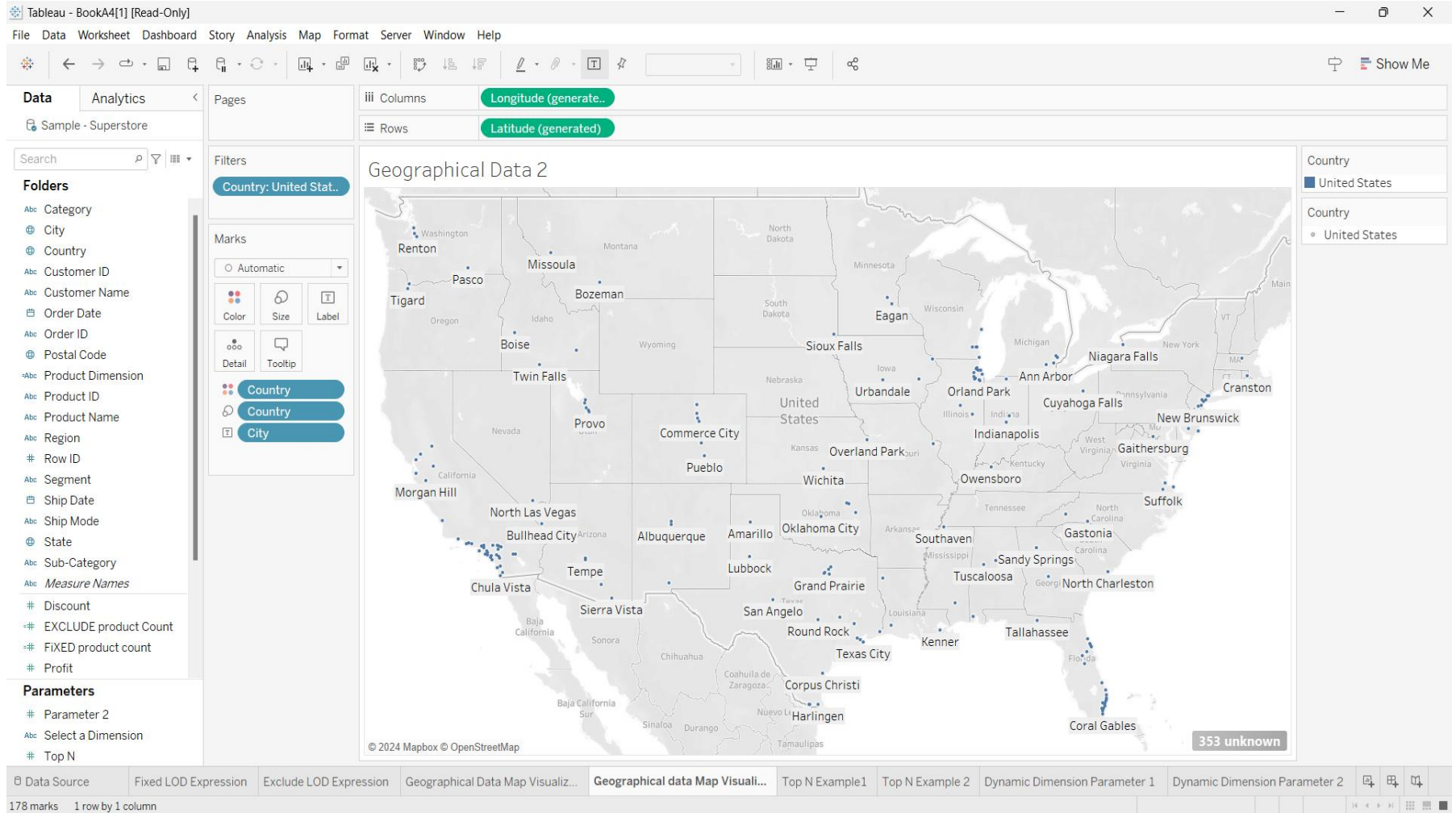
84 marks 28 rows by 3 columns SUM of Measure Values: 8,659

Create any 2 map visualizations using geographical data:

Map Visualization 1:

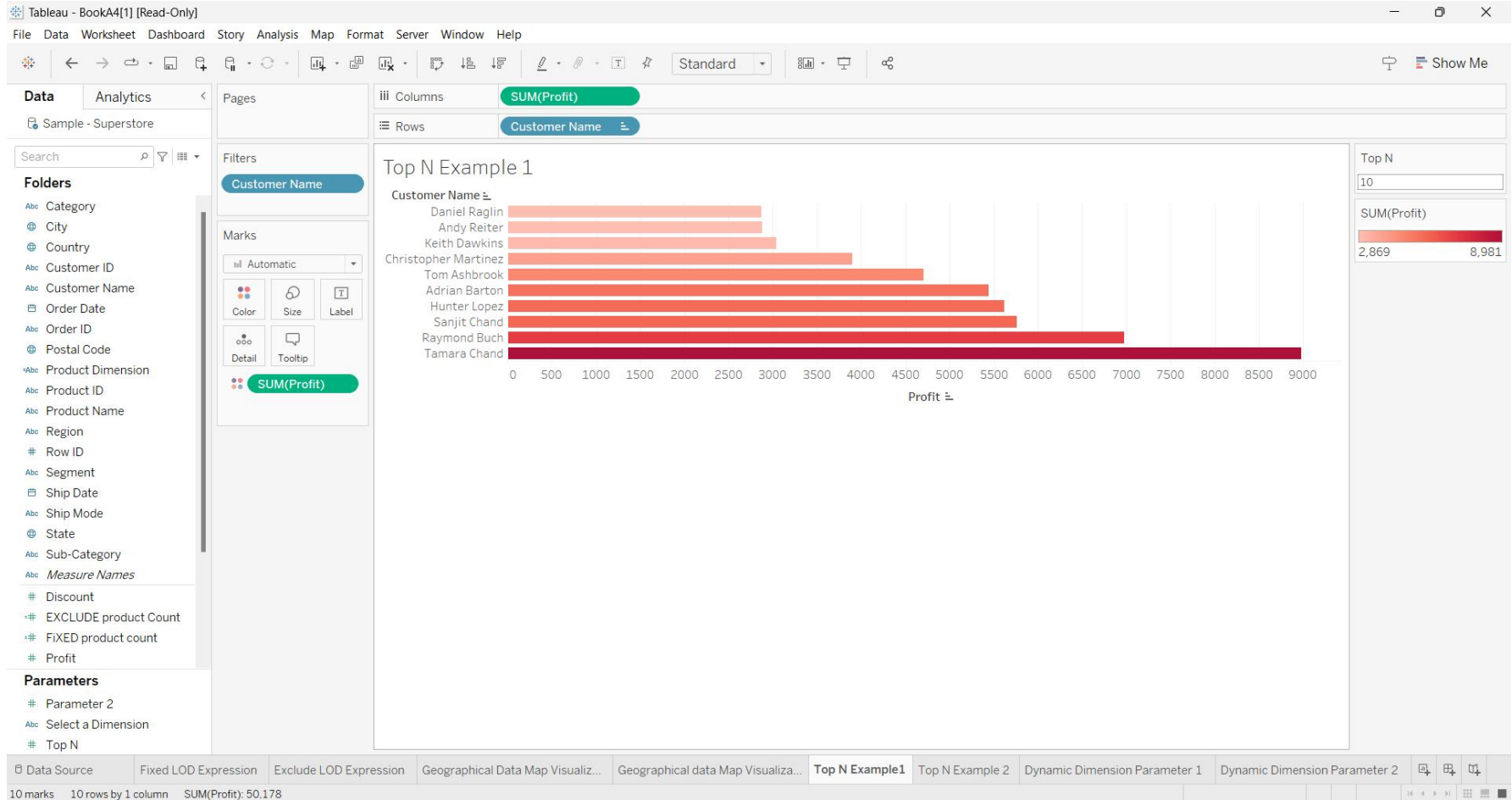


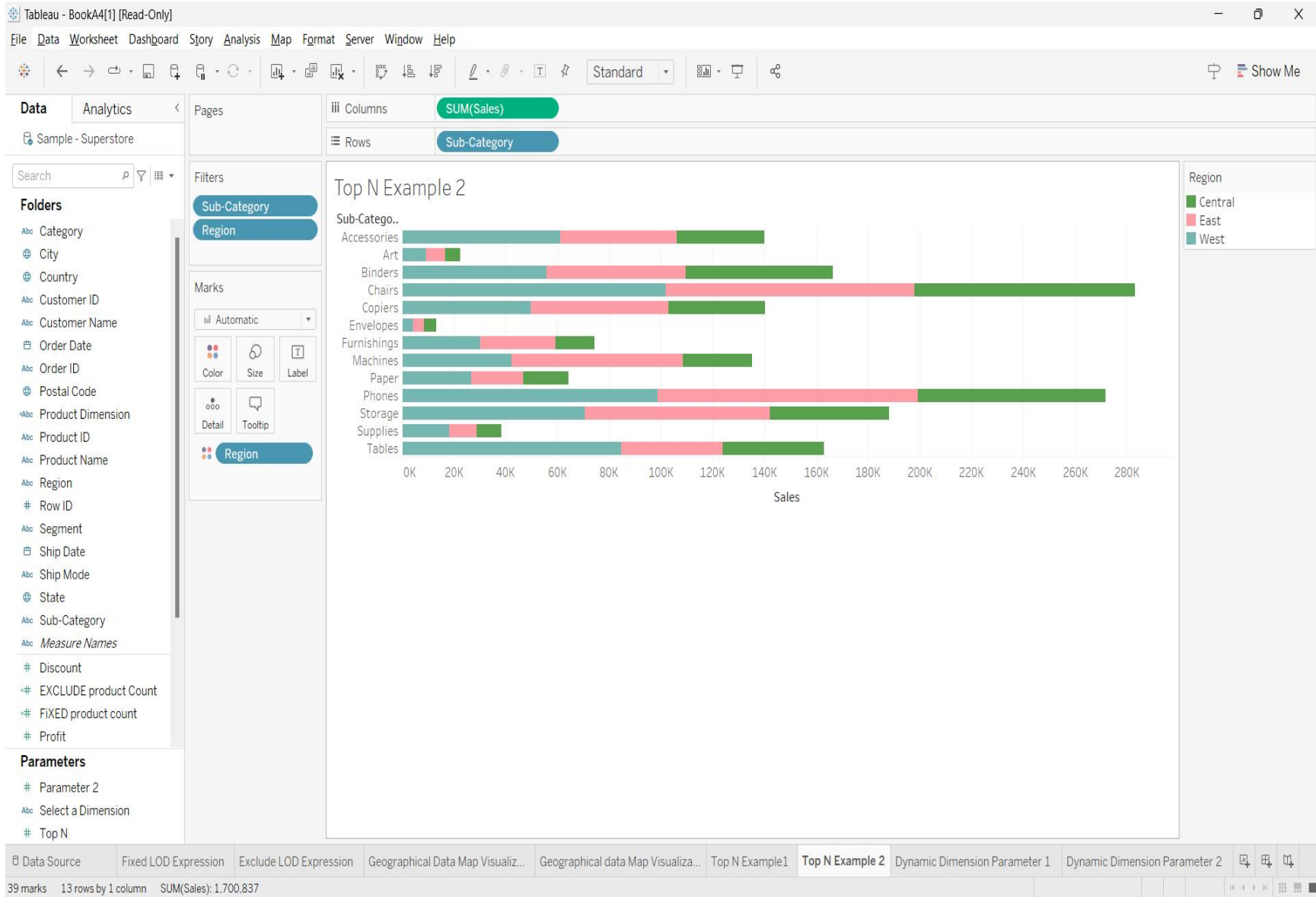
Map Visualization 2:



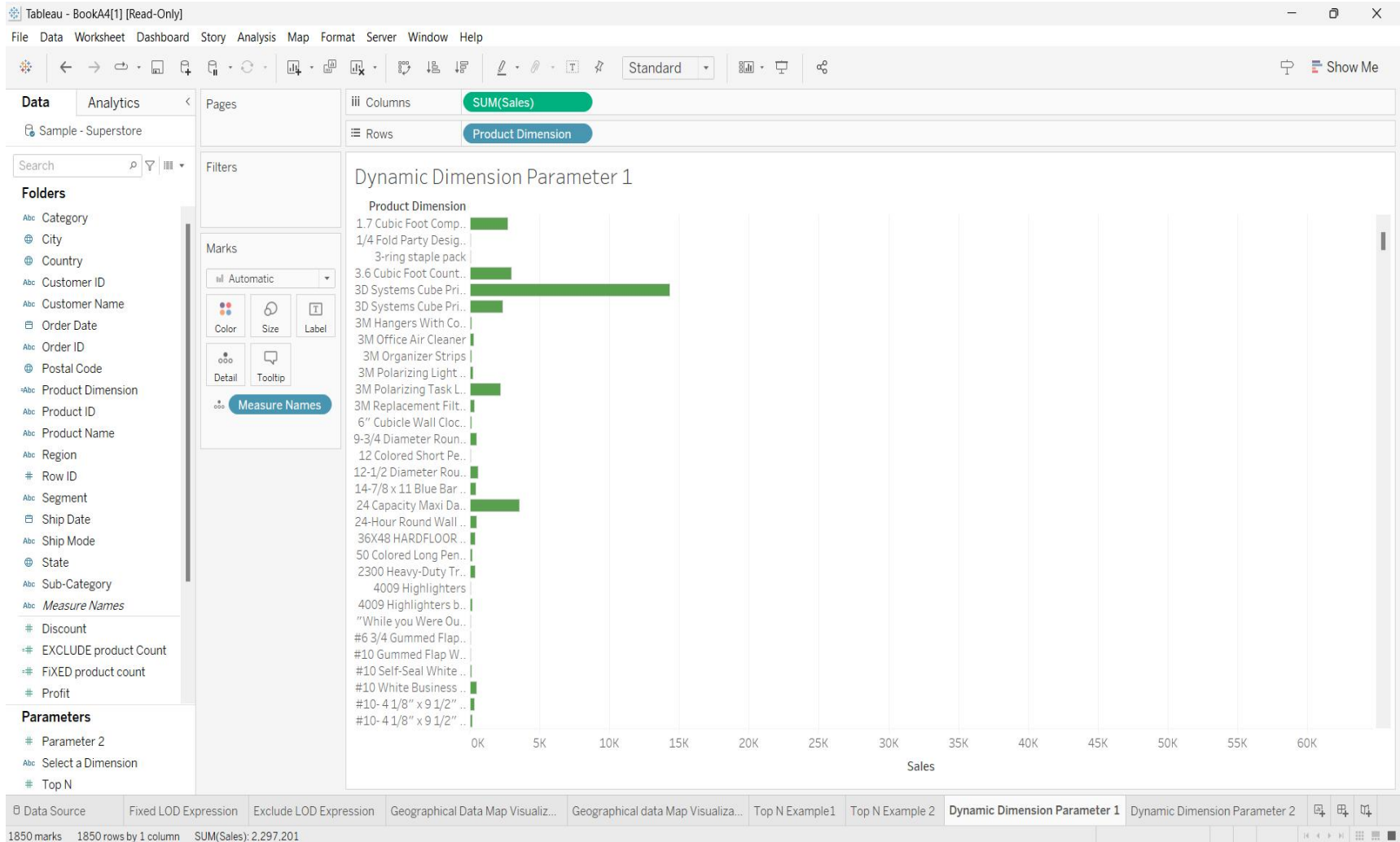
Create Top N and or Dynamic dimension parameters and utilize those in your workbook

Top N Parameters:





Dynamic Dimension parameter 1:



Data Analytics <

Sample - Superstore

Search

Folders

Abc	Category
🌐	City
🌐	Country
Abc	Customer ID
Abc	Customer Name
📅	Order Date
Abc	Order ID
🌐	Postal Code
✖Abc	Product Dimension
Abc	Product ID
Abc	Product Name
Abc	Region
#	Row ID
Abc	Segment
📅	Ship Date
Abc	Ship Mode
🌐	State
Abc	Sub-Category
Abc	Measure Names

Parameters

- # Parameter 2
- Abc Select a Dimension
- # Top N

Pages

Filters

Product Dimension

Marks

Automatic

• □

Measure Names

iii Columns

SUM(Sales)

☰ Rows

Product Dimension

Dynamic Dimension Parameter2

Product Dimension

3-ring staple pack

3M Polarizing Light ..

Howard Miller Dist.

HP Office Paper (20L..
HTC One

Xerox 1992

Xerox 1998

Xerox Blank Comput..

0 50 100 150 200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000 1050 1100 1150

Sales

Select a Dimension

Product Name

Data Source	Fixed LOD Expression	Exclude LOD Expression	Geographical Data Map Visualiz...	Geographical data Map Visualiza...	Top N Example1	Top N Example 2	Dynamic Dimension Parameter 1	Dynamic Dimension Parameter 2			
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8 marks 8 rows by 1 column SUM(Sales): 2 230