

SMART INTERNZ EXTERNSHIP

DATA ANALYTICS

ASSIGNMENT – 2

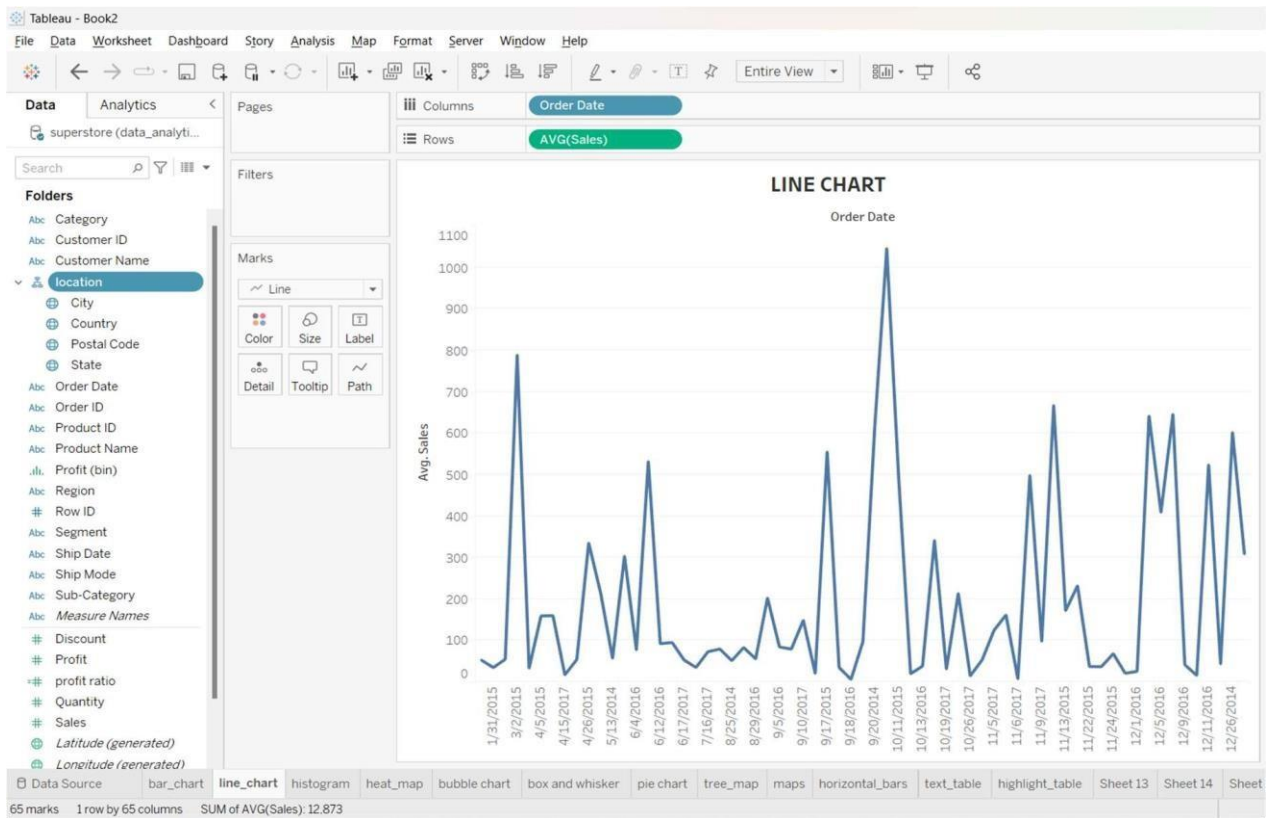
NAME: GOLLA C VENKAT

REG.NO: 20BCE2486

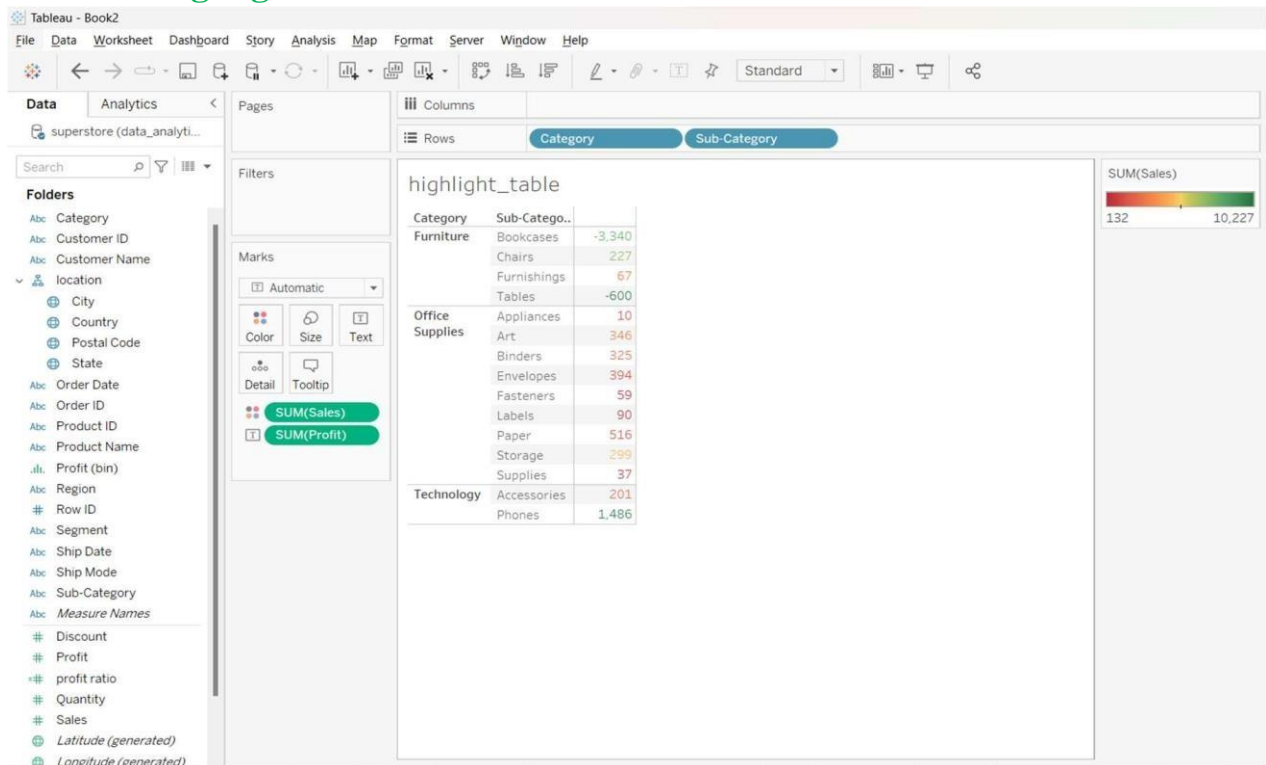
DATE: 28/03/2023

1) Create any 7 data visualizations/charts and perform the following.

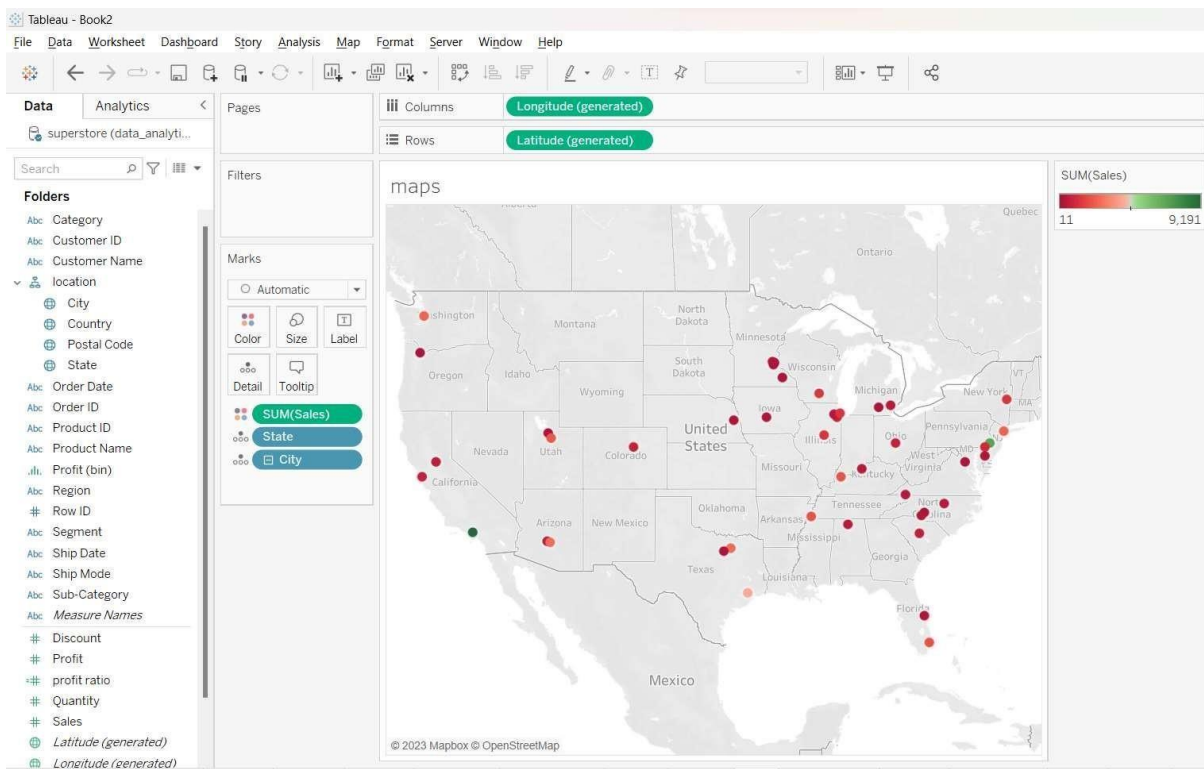
### a. Line Chart



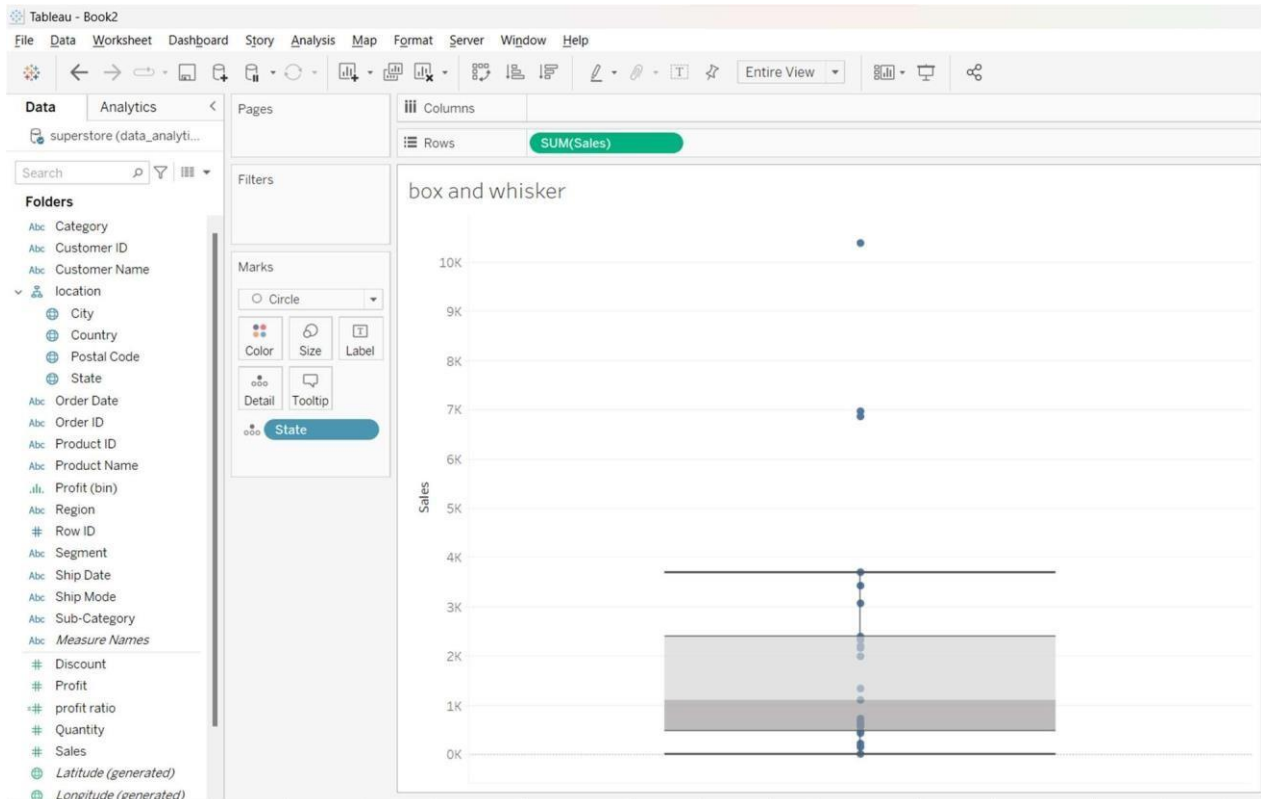
### b. Highlight Table



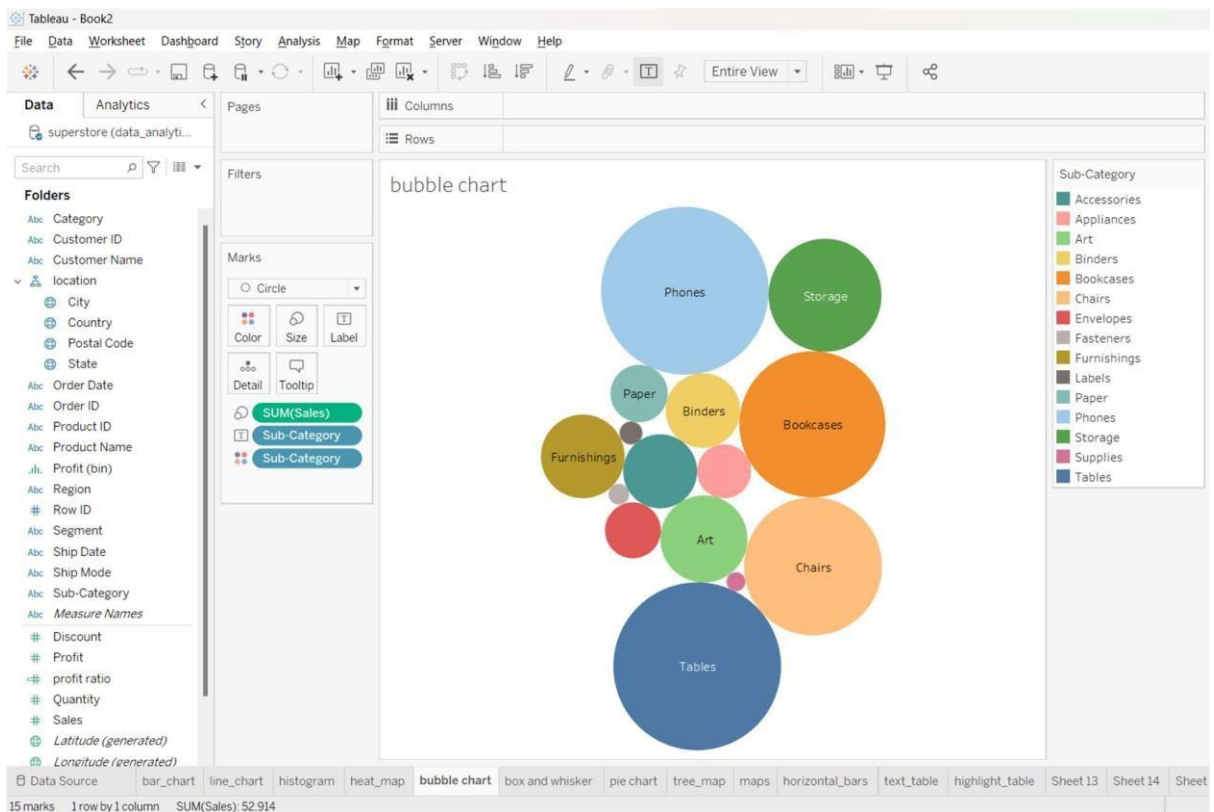
## c. Map format



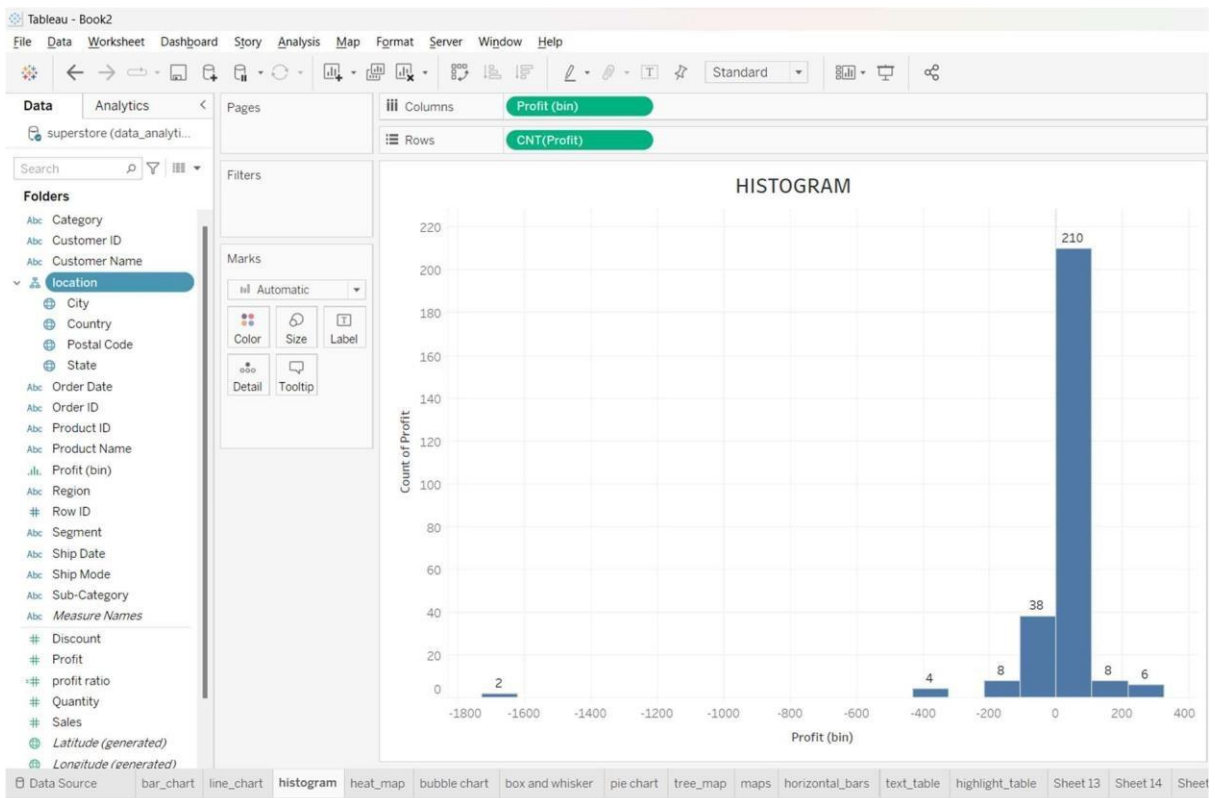
## d. Box and Whisker



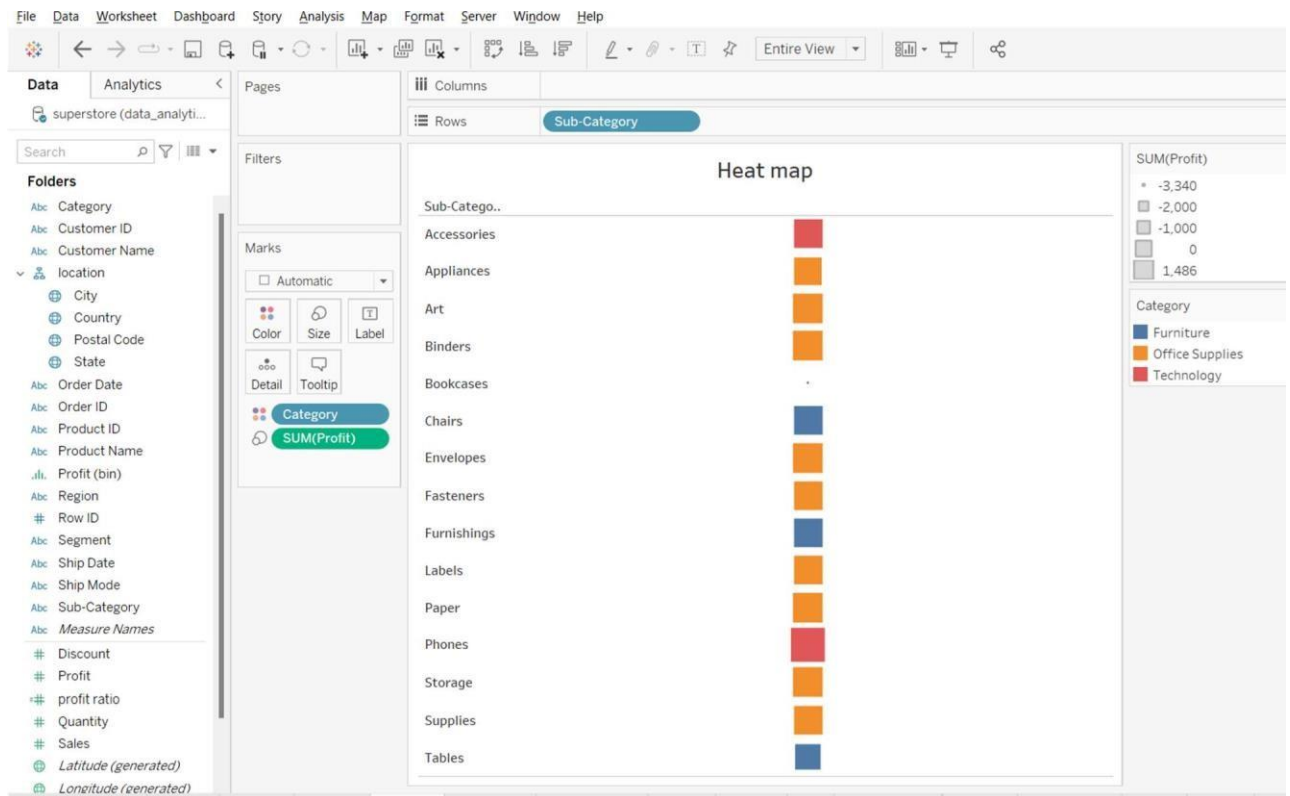
## e. Bubble chart



## f. Histogram



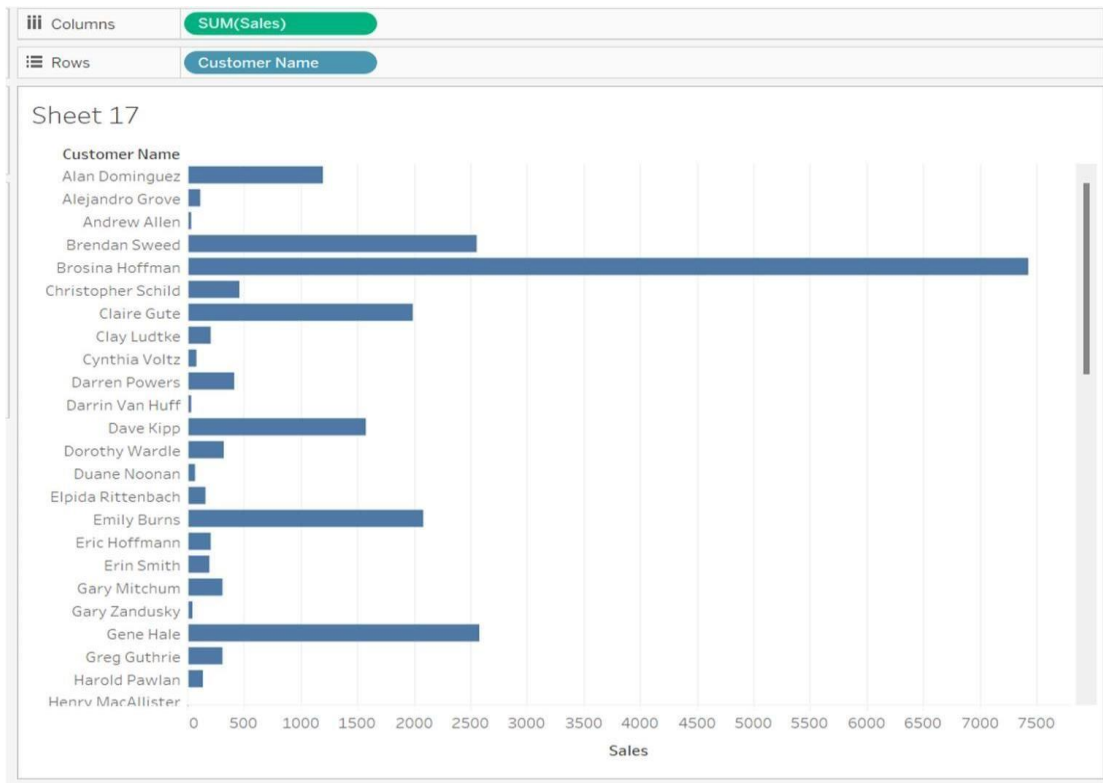
## g. Heat Map



## 2) Apply dimension filter, context, and measure filter on any of the three Visualizations.

### Dimensional Filter:

#### Before Filter:



Filter [Customer Name]

General Wildcard Condition Top

☒ Select from list ☐ Custom value list ☐ Use all

Enter search text

- ☐ Christopher Schild
- ☐ Claire Gute
- ☒ Clay Ludtke
- ☐ Cynthia Voltz
- ☒ Darren Powers
- ☐ Darrin Van Huff
- ☐ Dave Kipp
- ☐ Dorothy Wardle
- ☐ Duane Noonan
- ☒ Elpida Rittenbach
- ☐ Emily Burns

All None ☐ Exclude

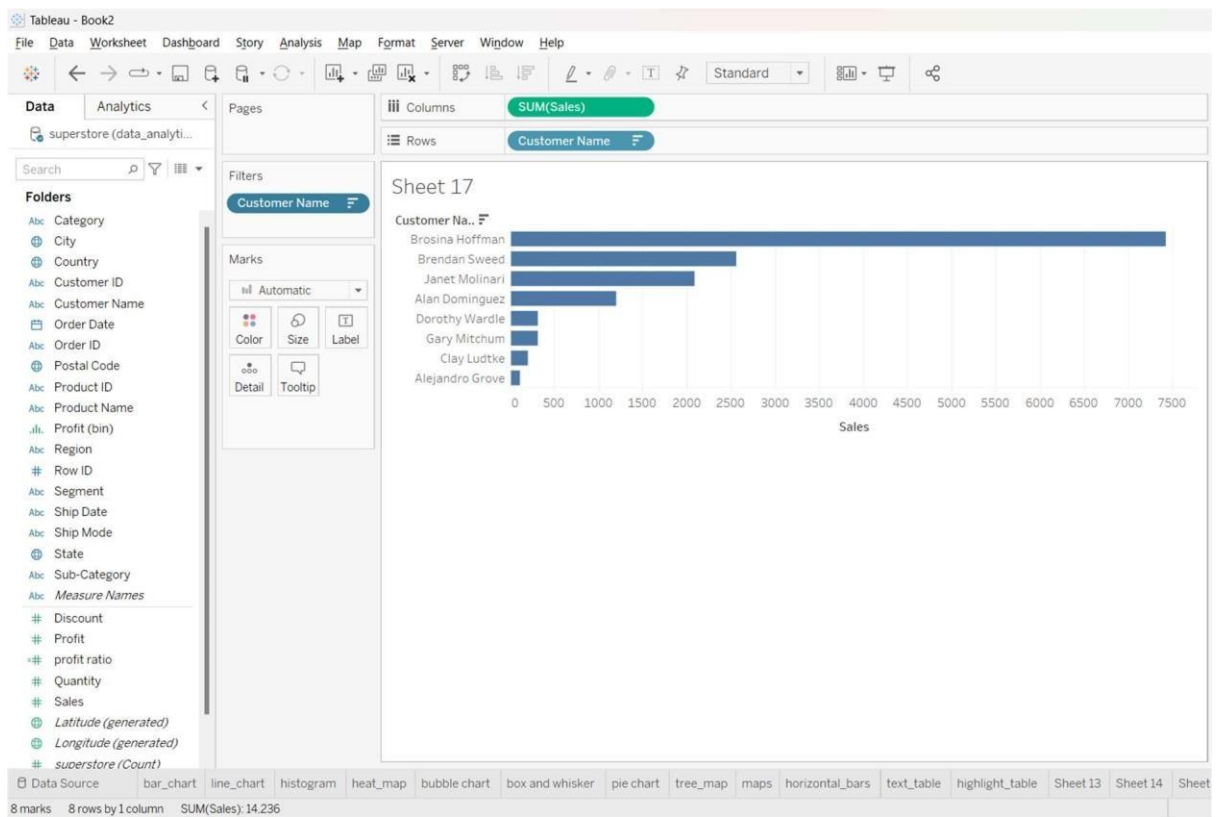
Summary

Field: [Customer Name]  
Selection: Selected 7 of 64 values  
Wildcard: All  
Condition: None  
Limit: None

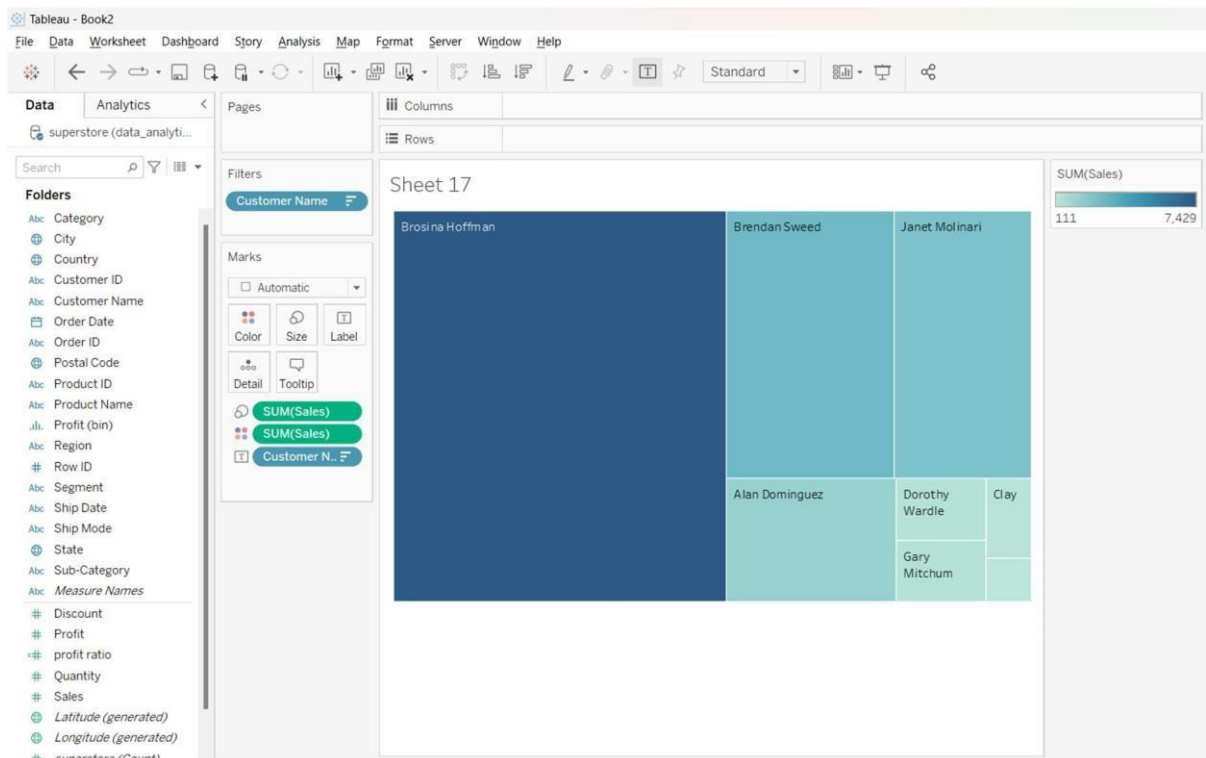
Reset OK Cancel Apply

## After Filter:

## Horizontal Bars:

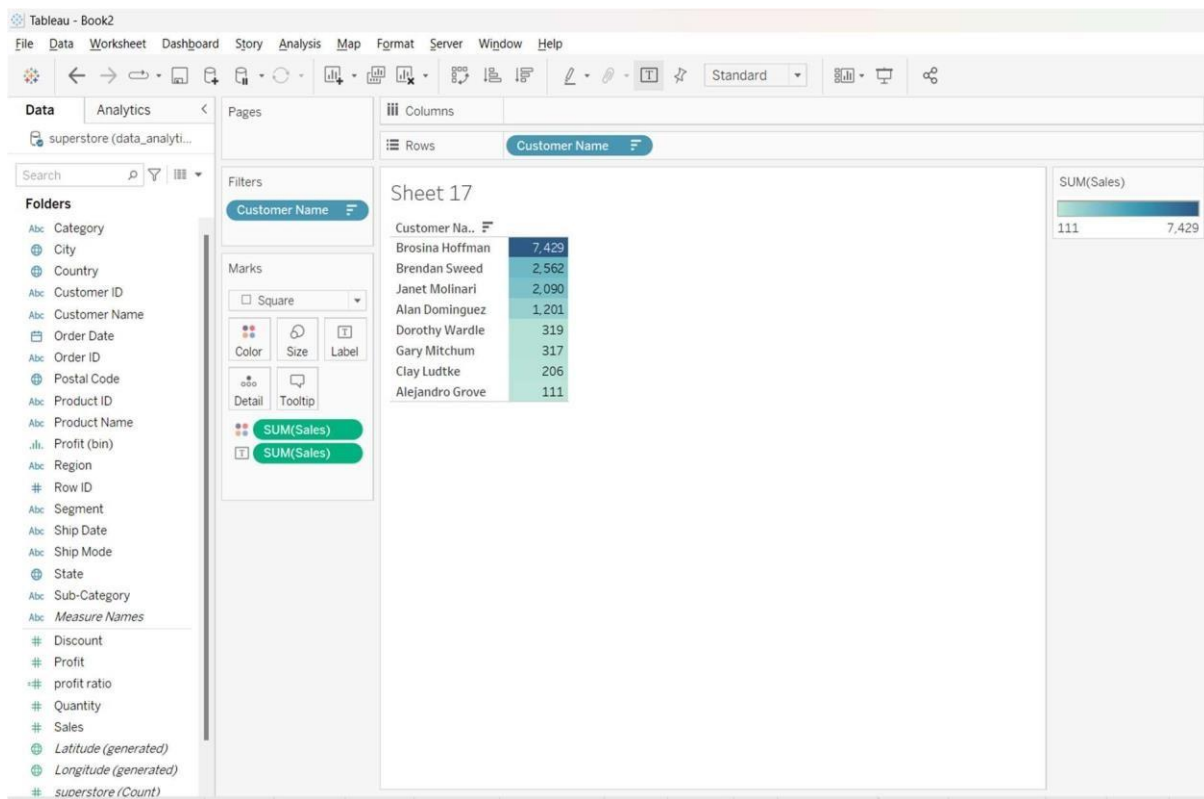


## Tree Map:



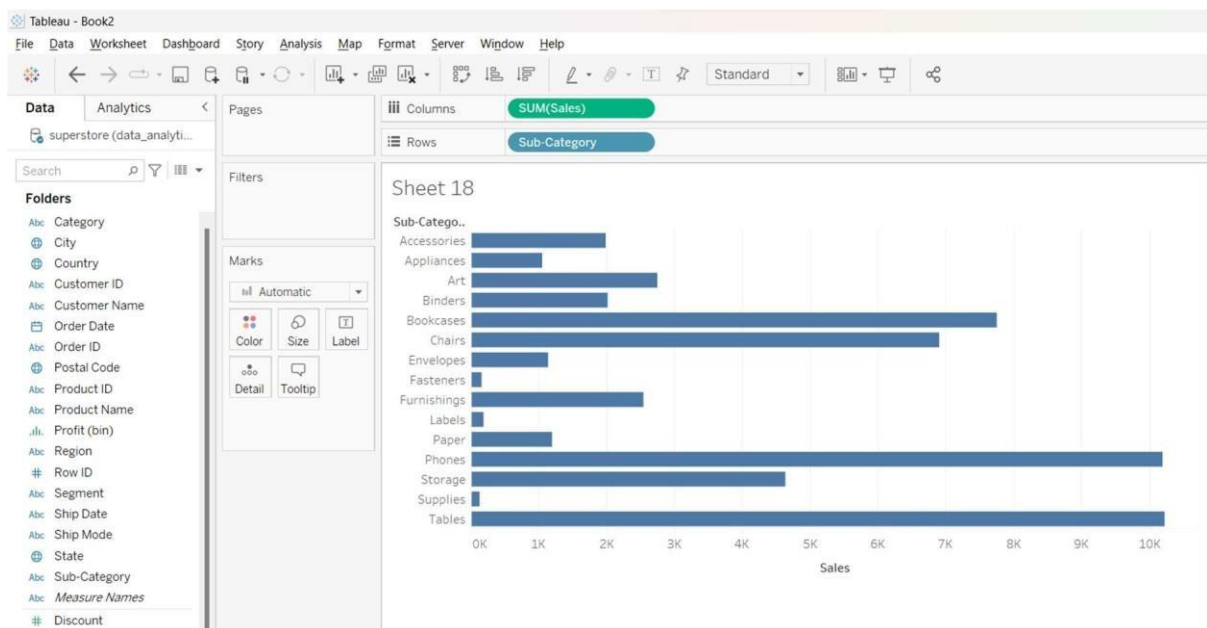


## Highlight Table:



## Context Filtering:

### Before context Filter:





Filter [Sub-Category] X

General Wildcard Condition Top

☐ None

☒ By field:

Top 10 by

Sales Sum

☐ By formula:

Top 10 by

Reset OK Cancel Apply

Filter [Category] X

General Wildcard Condition Top

☒ Select from list ☐ Custom value list ☐ Use all

Enter search text

☐ Furniture

☒ Office Supplies

☐ Technology

All None Exclude

Summary

Field: [Category]

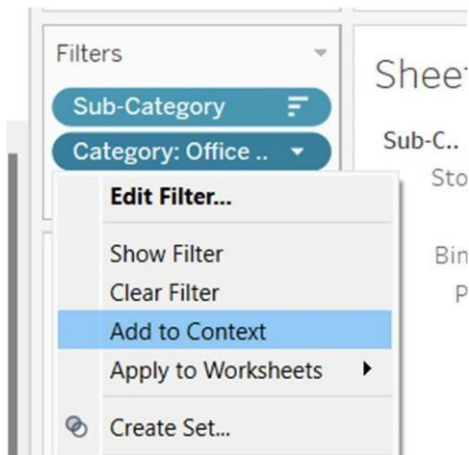
Selection: Selected 1 of 3 values

Wildcard: All

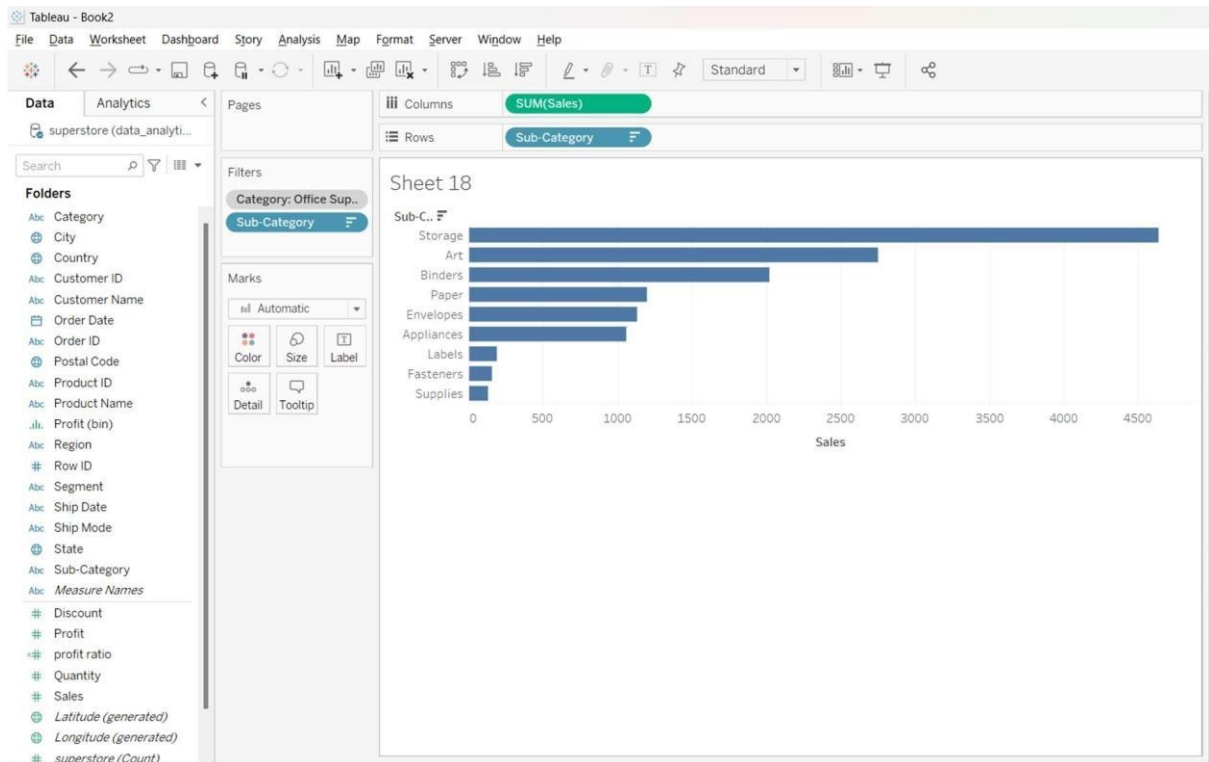
Condition: None

Limit: None

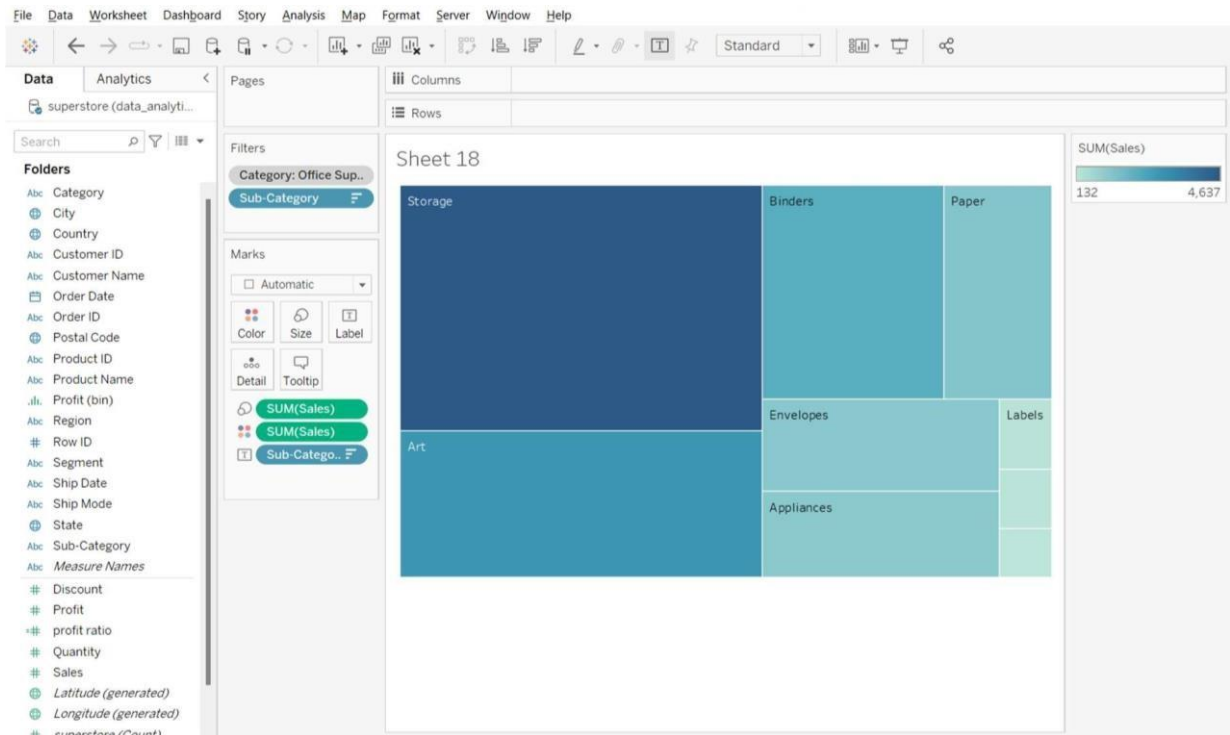
Reset OK Cancel Apply



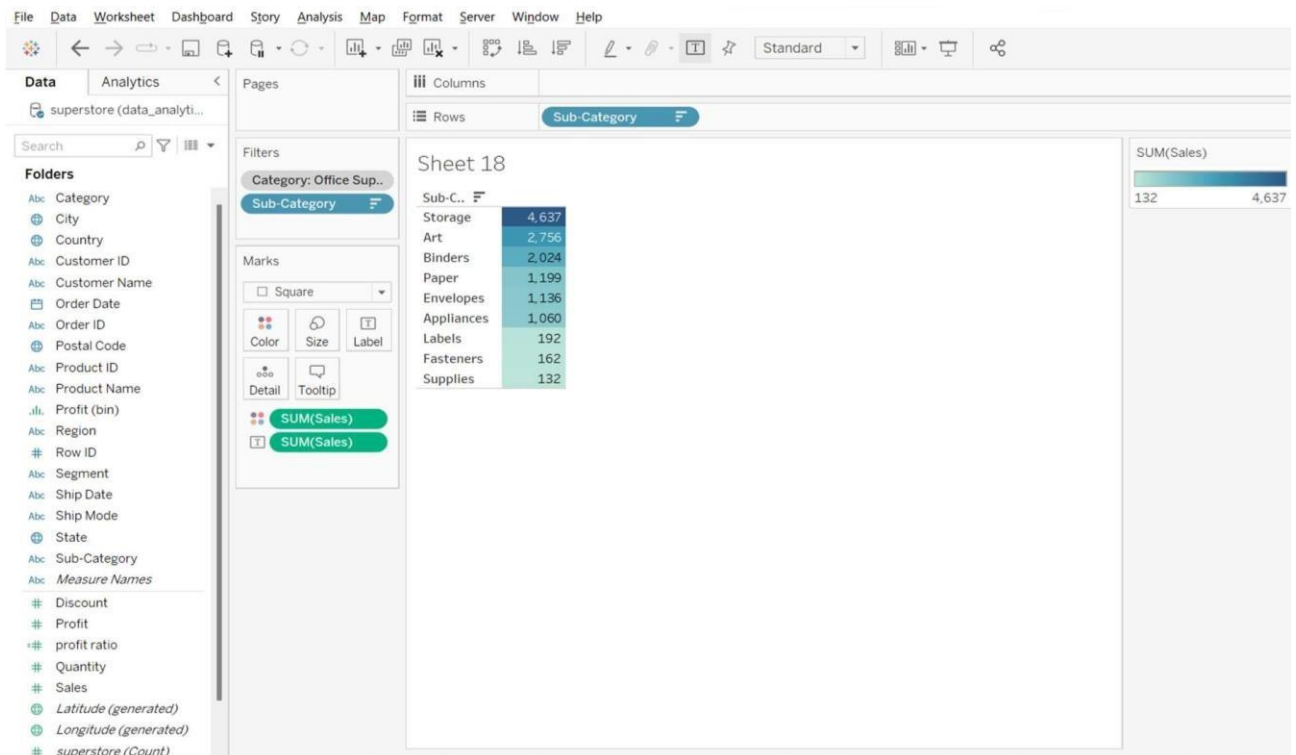
## After Context Filtering: Horizontal Bars:



## Tree Map:

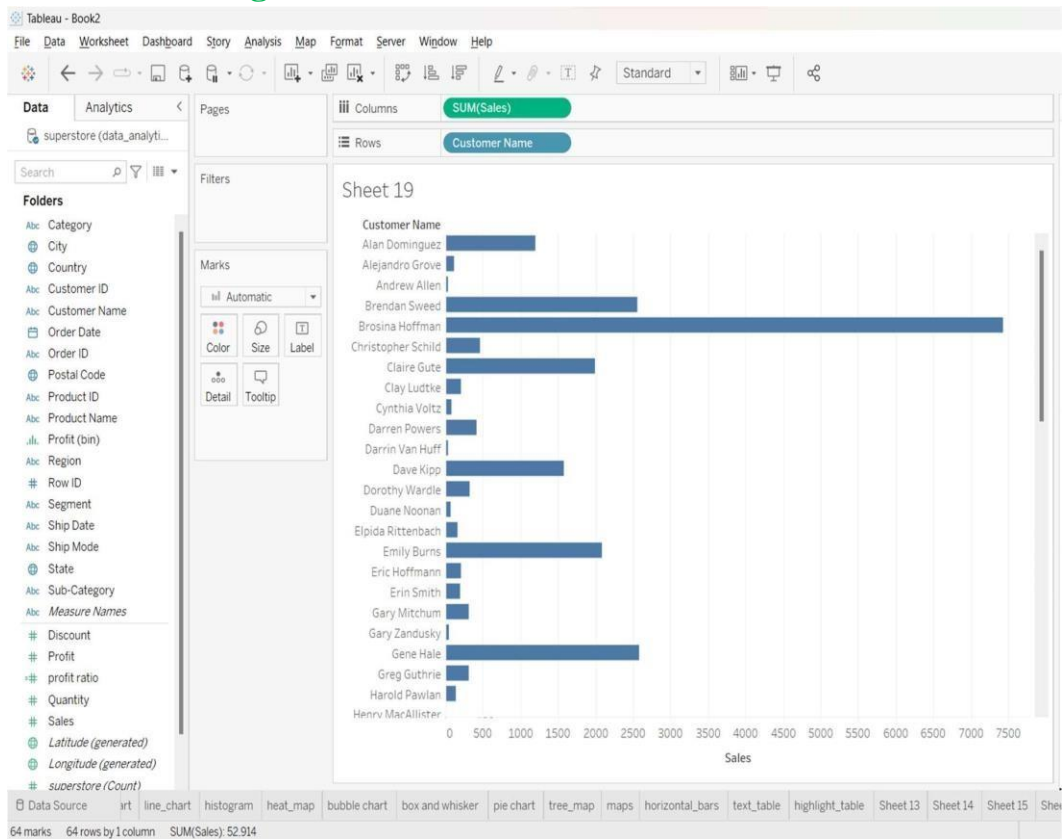


## Highlight Table:



## Measure Filtering:

### Before Filtering

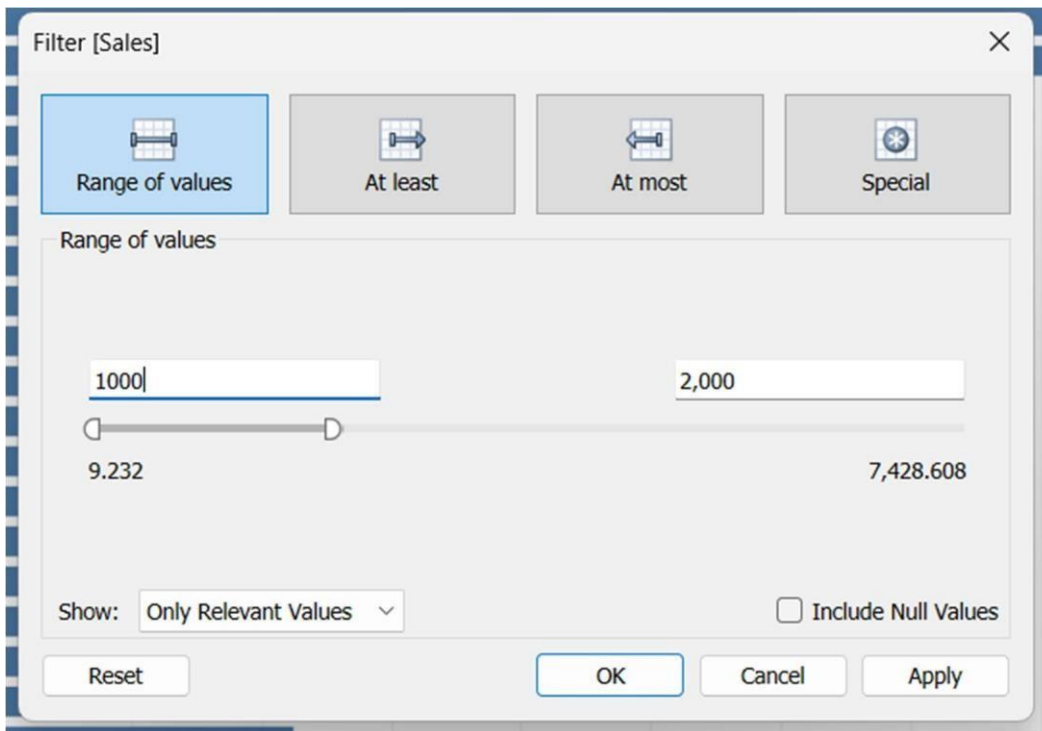


**Filter Field [Sales]** X

How do you want to filter on [Sales]?

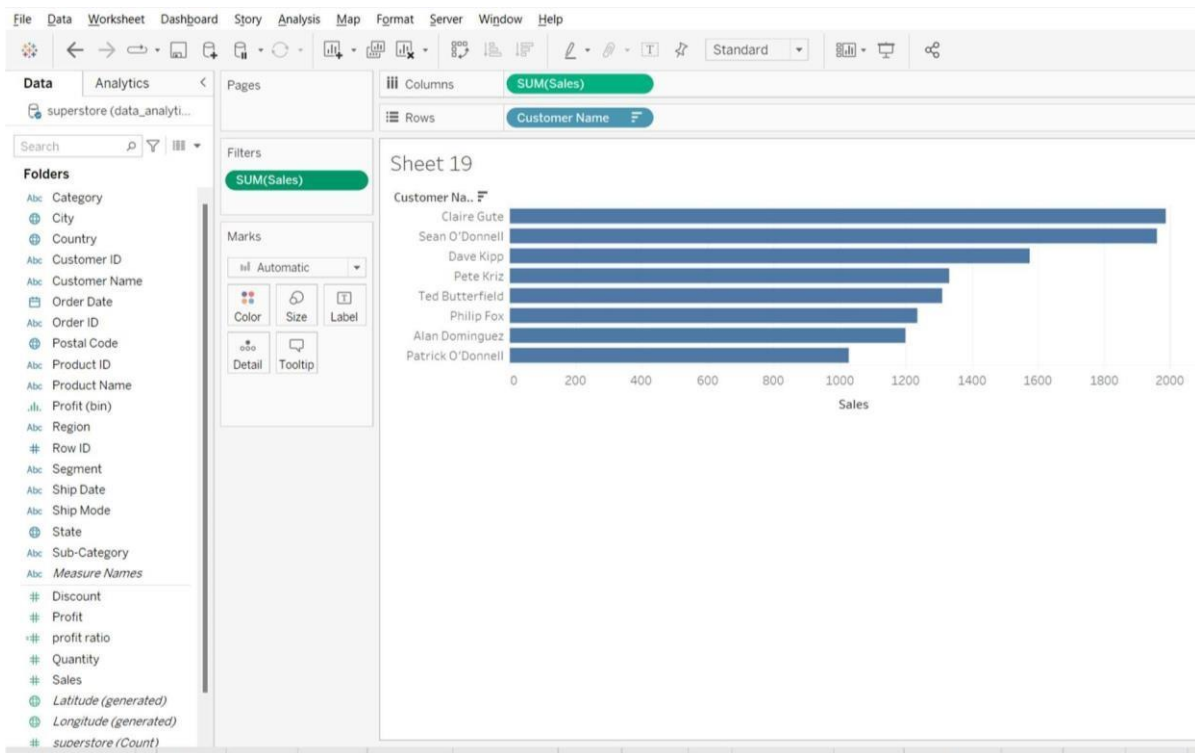
- # All values
- # **Sum**
- # Average
- # Count
- # Count (Distinct)
- # Minimum
- # Maximum
- # Standard deviation
- # Standard deviation (Population)
- # Variance
- # Variance (Population)
- # Attribute

Next > Cancel

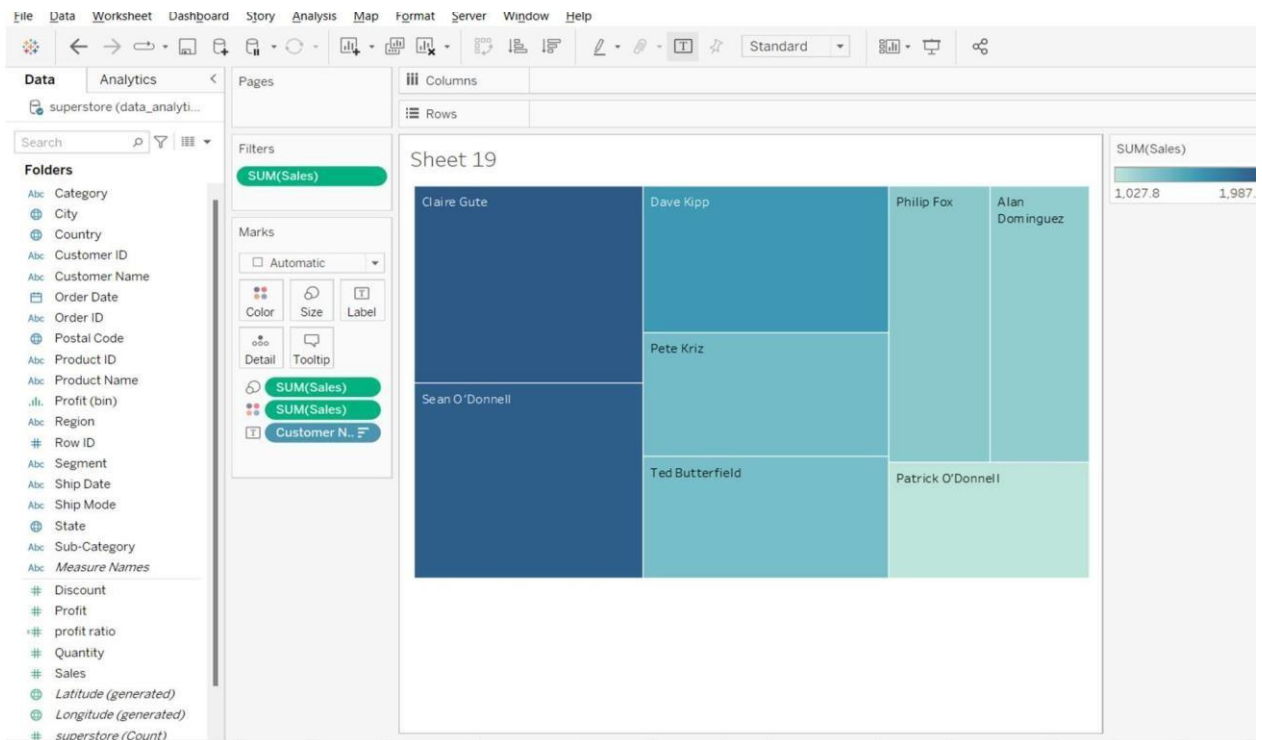


**Apply Filtering:**

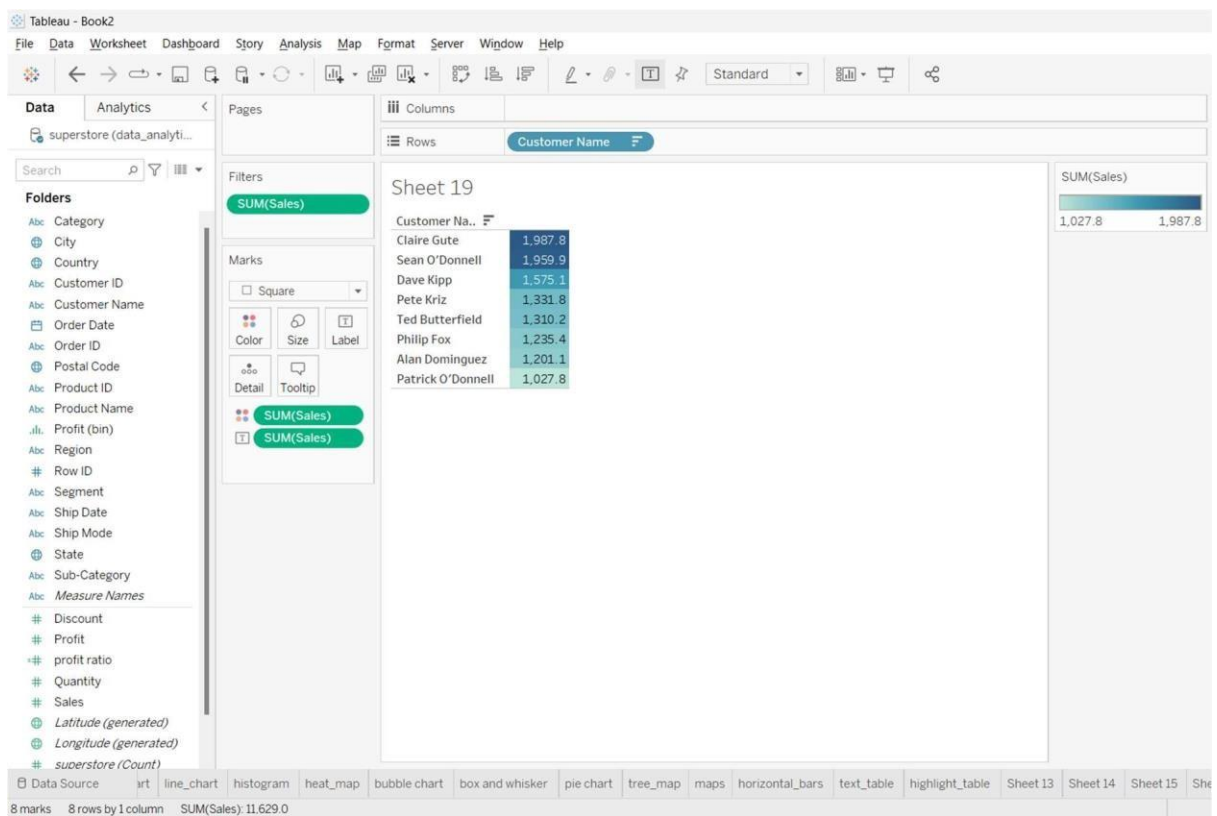
**Horizontal bars:**



## Tree map:



## Highlight Table:



### 3) Perform the following data manipulations on your dataset

#### Create a Hierarchy:

The screenshot shows the Tableau Desktop interface. In the 'Folders' pane on the left, the 'City' field is selected, and a right-click context menu is open. The 'Hierarchy' option is highlighted, and a sub-menu is visible with 'Create Hierarchy...' selected. The main view shows a table named 'highlight\_table' with columns 'Category' and 'Sub-Category'. The table data is as follows:

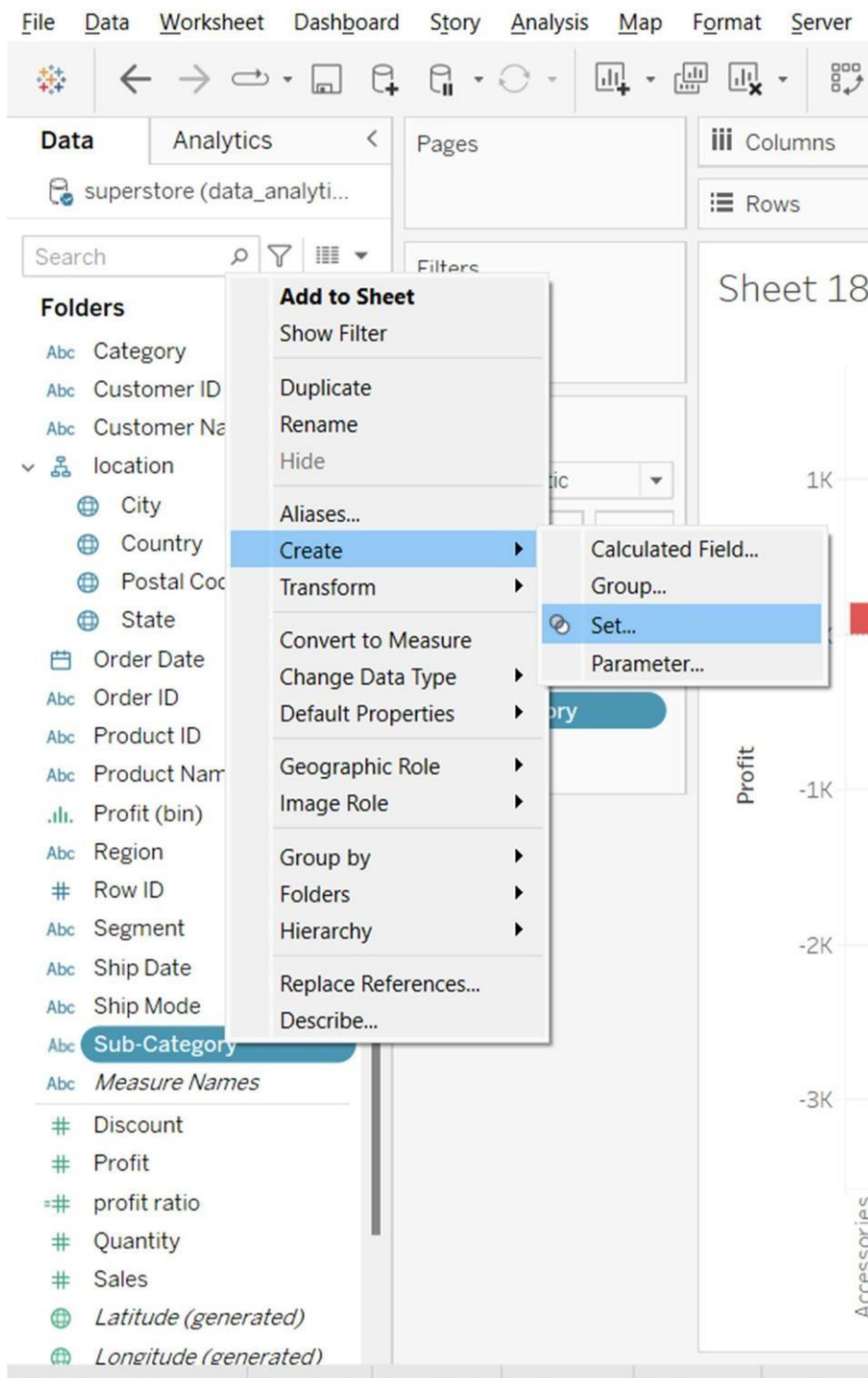
Category	Sub-Category	
Furniture	Bookcases	-3,340
	Chairs	227
	Furnishings	67
	Tables	-600
Office Supplies	Appliances	10
	Art	346
	Binders	325
	Envelopes	394
	Fasteners	59
	Labels	90
	Paper	516
	Storage	299
	Supplies	37
	Accessories	201
	Phones	1,486

The 'Create Hierarchy' dialog box is shown. The 'Name' field contains the text 'location'. There are 'OK' and 'Cancel' buttons at the bottom right.

The screenshot shows the 'Folders' pane in Tableau. A new hierarchy named 'location' has been created and is highlighted with a blue box. The hierarchy includes the following fields: City, Country, Postal Code, and State. Below the 'location' hierarchy, other fields like Order Date, Order ID, and Product ID are visible.



## Create a set:



Create Set ✕

Name: Sub-Category Set

General Condition Top

☐ None

☒ By field:

Top 10 by

Sales Sum

☐ By formula:

Top 10 by

Reset OK Cancel

- Abc Product Name
- .ll. Profit (bin)
- Abc Region
- # Row ID
- Abc Segment
- Abc Ship Date
- Abc Ship Mode
- Abc Sub-Category
- ☒ Sub-Category Set
- Abc Measure Names
- # Discount
- # Profit
- =# profit ratio

## Create a group:

The screenshot shows the Tableau Desktop interface. The 'Data' pane on the left lists various fields, including 'Sub-Category' which is highlighted. A right-click context menu is open over 'Sub-Category', showing options like 'Add to Sheet', 'Duplicate', 'Rename', 'Hide', 'Aliases...', 'Create', 'Transform', 'Convert to Measure', 'Change Data Type', 'Default Properties', 'Geographic Role', 'Image Role', 'Group by', 'Folders', 'Hierarchy', 'Replace References...', and 'Describe...'. The 'Create' option is selected, and a sub-menu is displayed with options: 'Calculated Field...', 'Group...', 'Set...', and 'Parameter...'. The 'Group...' option is highlighted. The background shows a bar chart titled 'Sheet 18' with 'Sub-Category' on the x-axis and 'SUM(Profit)' on the y-axis. The chart displays bars for 'Accessories', 'Appliances', 'Art', 'Binders', 'Bookcases', and 'Chairs'. The 'Bookcases' bar is the most prominent, extending downwards to approximately -3.5K. The status bar at the bottom indicates '15 marks', '1 row by 15 columns', and 'SUM(Profit): 118'.

Create Group [Sub-Category] ✕

Field Name:

Groups:

- Appliances
- Art
- Binders
- Bookcases
- Chairs
- Envelopes
- Fasteners
- Furnishings
- Labels
- Paper
- Phones
- Storage
- Supplies
- Tables

☒ Show Add Location

☐ Include 'Other'

Create Group [Sub-Category] ✕

Field Name:

Groups:

- Accessories
- Appliances
- Art
- Binders
- ☒ [Bookcases, Chairs, Furnishings and 1 more]
  - Bookcases
  - Chairs
  - Furnishings
  - Tables
- Envelopes
- Fasteners
- Labels
- Paper
- Phones

☒ Show Add Location

☐ Include 'Other'

