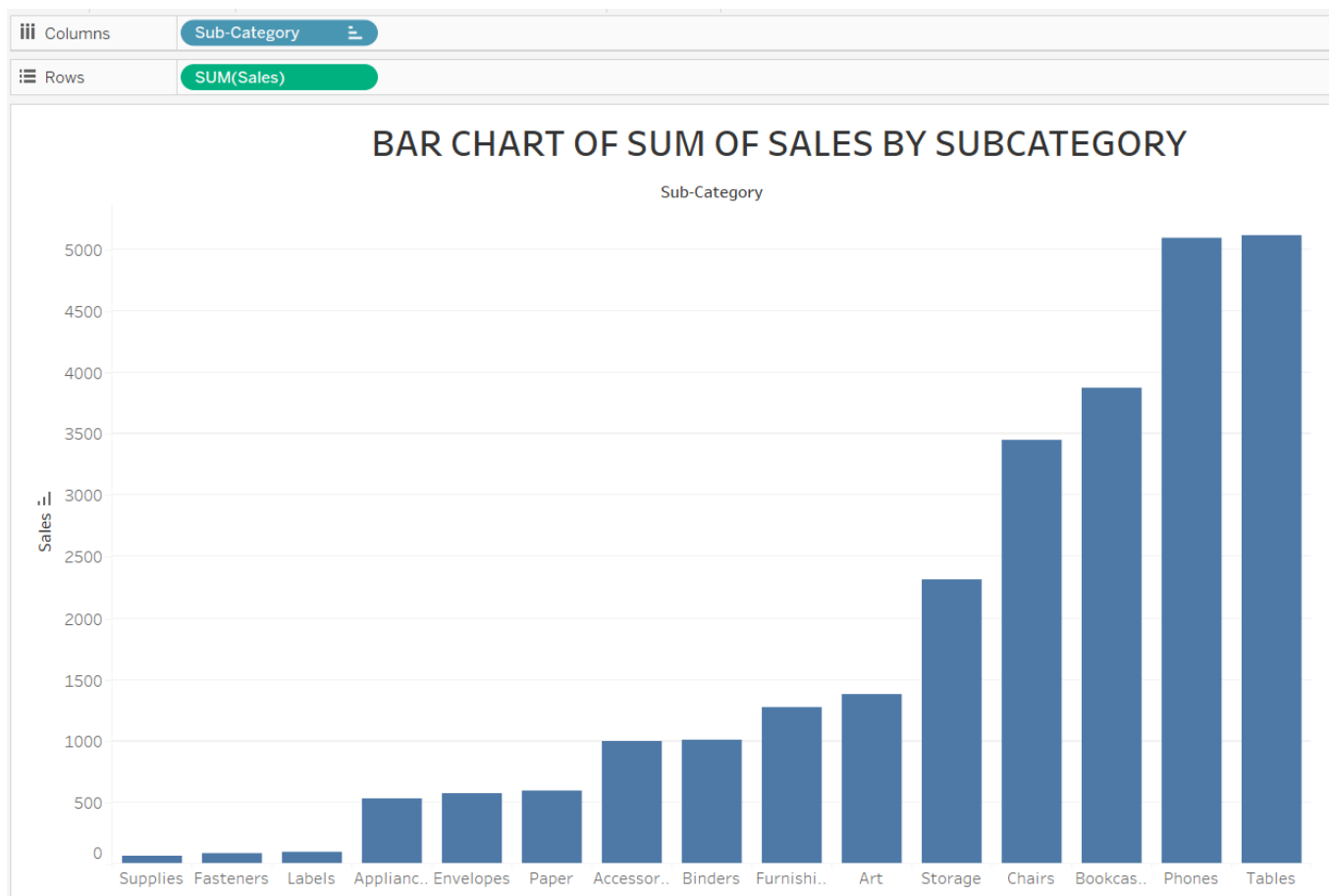# KANCHARLA NAVEEN KUMAR 20BPS1137

## Assignment-2

1) Create any 7 data visualizations/charts and perform the following
2) Apply dimension filter, context and measure filter on any of the three visualizations
3) Perform the following data manipulations on your dataset
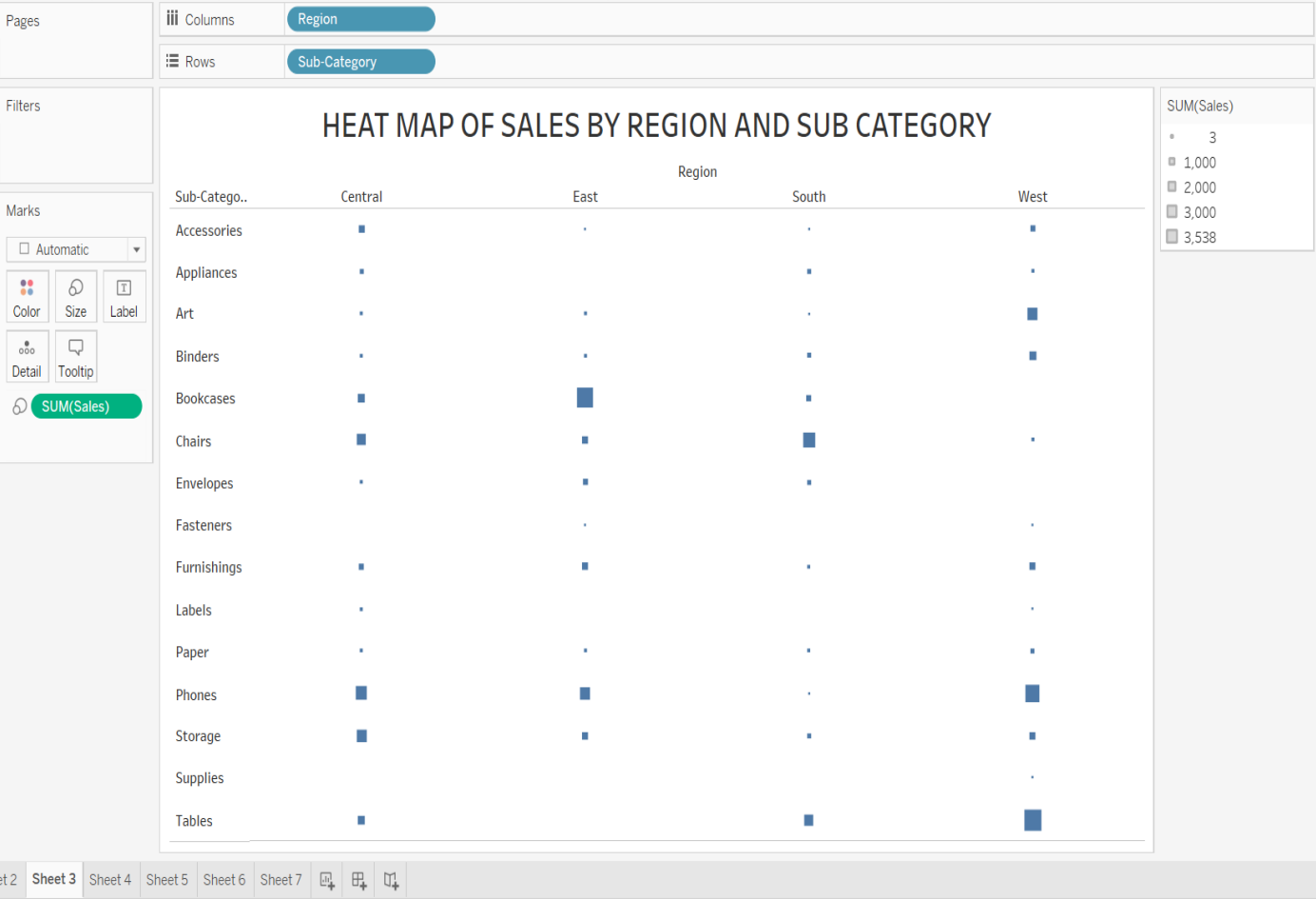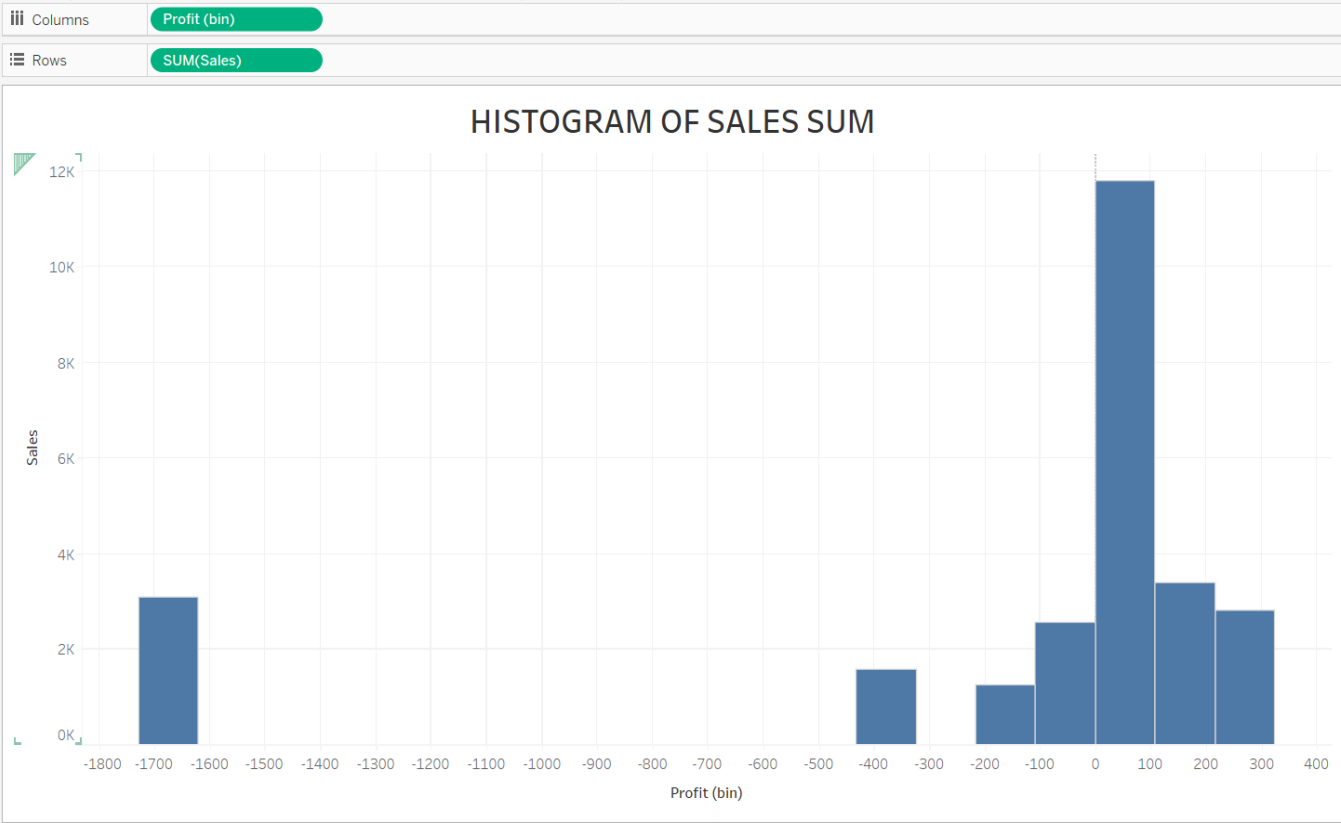   - create a Hierarchy
   - create a set
   - create a group

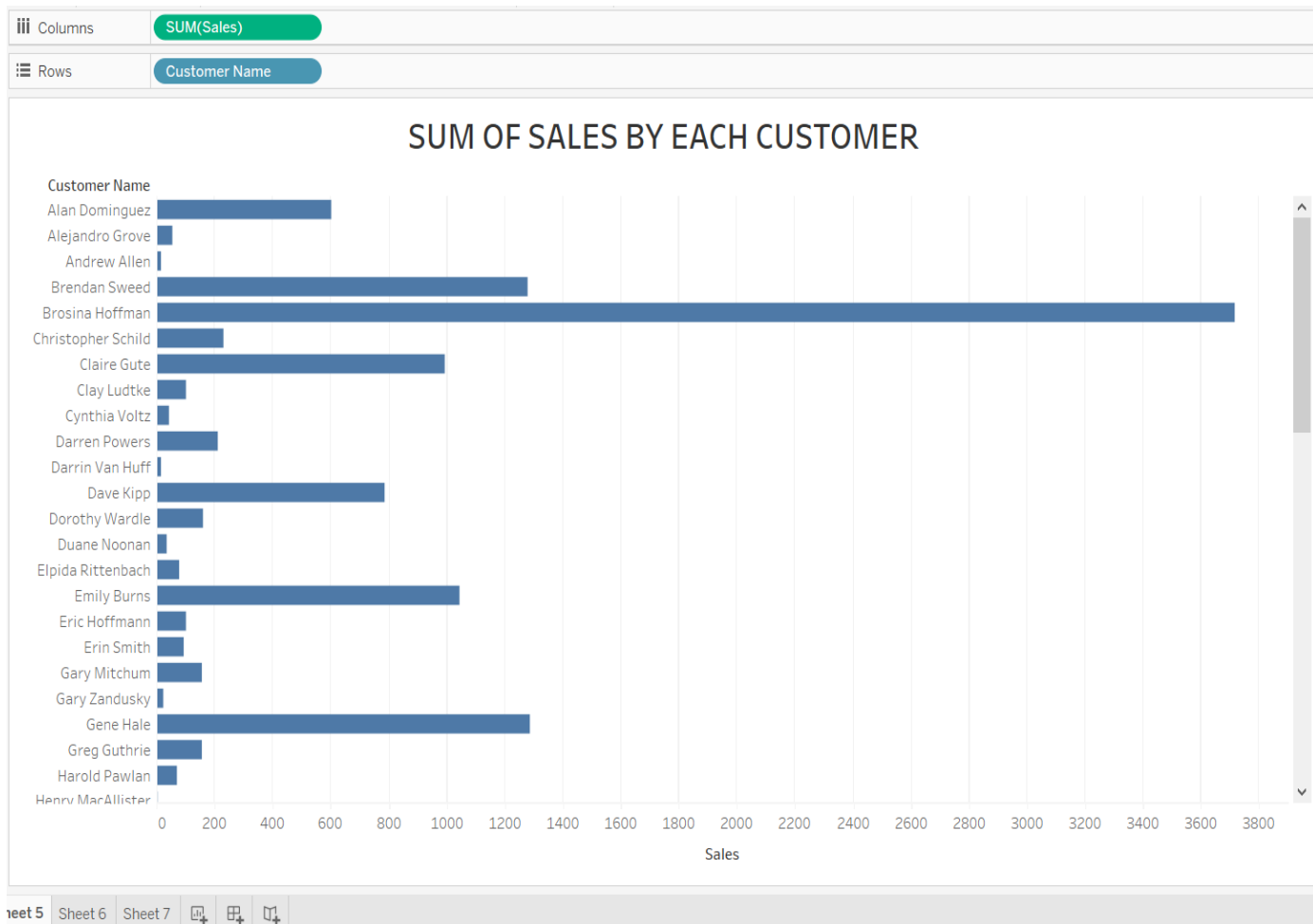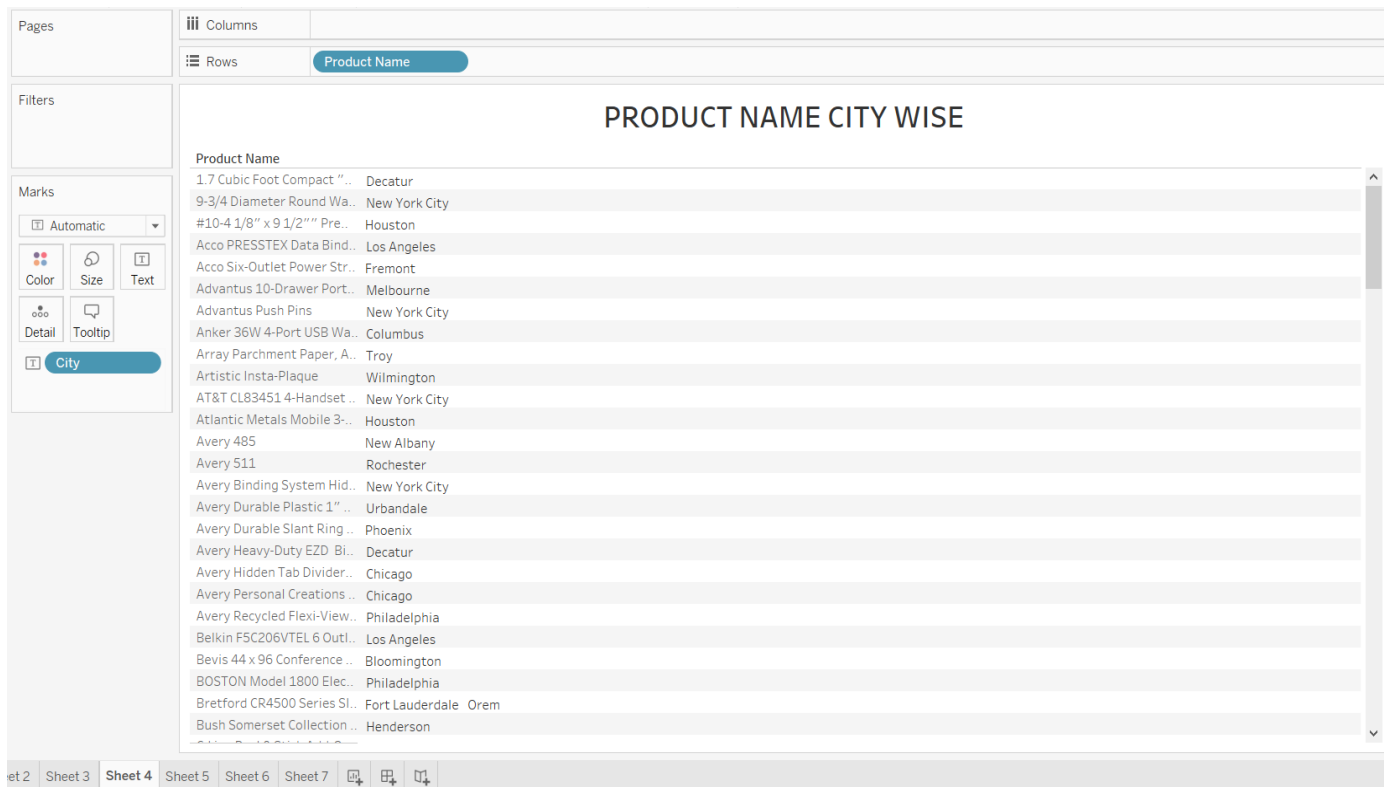**Note : Use 'superstore-sales' dataset**

**Google drive link:**

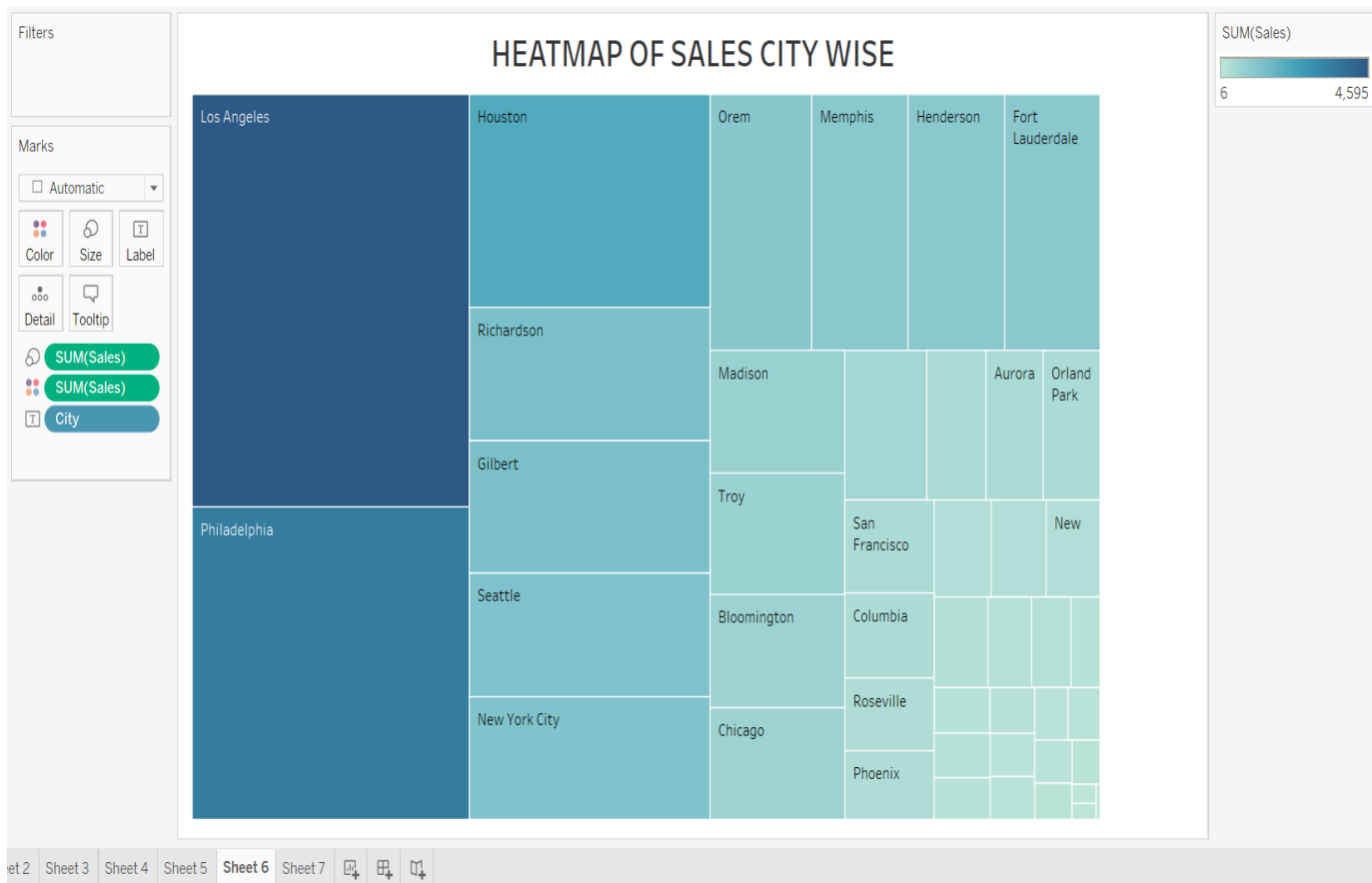https://drive.google.com/drive/folders/1OXCPgLDa8z0KV6kDtQ6BGmZ90szOYFLN?usp=share_link

**1.**

| | |
|---|---|
| **III** Columns | Profit (bin) |
| ☰ Rows | SUM(Sales) |

## HISTOGRAM OF SALES SUM



Sales (y-axis): 0K, 2K, 4K, 6K, 8K, 10K, 12K

Profit (bin) (x-axis): -1800, -1700, -1600, -1500, -1400, -1300, -1200, -1100, -1000, -900, -800, -700, -600, -500, -400, -300, -200, -100, 0, 100, 200, 300, 400

| | | |
|---|---|---|
| Pages | **III** Columns | Region |
| | ☰ Rows | Sub-Category |
| Filters | | |

Marks

☐ Automatic ▼

Color | Size | Label

Detail | Tooltip

◔ SUM(Sales)

## HEAT MAP OF SALES BY REGION AND SUB CATEGORY

Region

| Sub-Catego.. | Central | East | South | West |
|---|---|---|---|---|
| Accessories | ■ | · | · | ■ |
| Appliances | ■ | | ■ | · |
| Art | · | · | · | ■ |
| Binders | · | · | ■ | ■ |
| Bookcases | ■ | ■ | ■ | |
| Chairs | ■ | ■ | ■ | · |
| Envelopes | · | ■ | | |
| Fasteners | | · | | · |
| Furnishings | ■ | ■ | · | ■ |
| Labels | · | | | · |
| Paper | · | · | · | · |
| Phones | ■ | ■ | · | ■ |
| Storage | ■ | ■ | ■ | ■ |
| Supplies | | | | · |
| Tables | ■ | | ■ | ■ |

SUM(Sales)
- 3
- 1,000
- 2,000
- 3,000
- 3,538

et 2  **Sheet 3**  Sheet 4  Sheet 5  Sheet 6  Sheet 7

**Pages**

**Columns**

**Rows** | Product Name

**Filters**

**Marks**

Automatic

Color | Size | Text
Detail | Tooltip

City

# PRODUCT NAME CITY WISE

| Product Name | |
|---|---|
| 1.7 Cubic Foot Compact "... | Decatur |
| 9-3/4 Diameter Round Wa... | New York City |
| #10-4 1/8" x 9 1/2"" Pre... | Houston |
| Acco PRESSTEX Data Bind... | Los Angeles |
| Acco Six-Outlet Power Str... | Fremont |
| Advantus 10-Drawer Port... | Melbourne |
| Advantus Push Pins | New York City |
| Anker 36W 4-Port USB Wa... | Columbus |
| Array Parchment Paper, A... | Troy |
| Artistic Insta-Plaque | Wilmington |
| AT&T CL83451 4-Handset ... | New York City |
| Atlantic Metals Mobile 3-... | Houston |
| Avery 485 | New Albany |
| Avery 511 | Rochester |
| Avery Binding System Hid... | New York City |
| Avery Durable Plastic 1" ... | Urbandale |
| Avery Durable Slant Ring ... | Phoenix |
| Avery Heavy-Duty EZD  Bi... | Decatur |
| Avery Hidden Tab Divider... | Chicago |
| Avery Personal Creations ... | Chicago |
| Avery Recycled Flexi-View... | Philadelphia |
| Belkin F5C206VTEL 6 Outl... | Los Angeles |
| Bevis 44 x 96 Conference ... | Bloomington |
| BOSTON Model 1800 Elec... | Philadelphia |
| Bretford CR4500 Series Sl... | Fort Lauderdale  Orem |
| Bush Somerset Collection ... | Henderson |

heet 2 | Sheet 3 | **Sheet 4** | Sheet 5 | Sheet 6 | Sheet 7

**Columns** | SUM(Sales)

**Rows** | Customer Name

# SUM OF SALES BY EACH CUSTOMER



Sheet 5 | Sheet 6 | Sheet 7

## HEATMAP OF SALES CITY WISE

SUM(Sales)

6 — 4,595

| City | |
|---|---|
| Los Angeles | Houston |
| | Richardson |
| | Gilbert |
| Philadelphia | Seattle |
| | New York City |

Orem · Memphis · Henderson · Fort Lauderdale

Madison · Aurora · Orland Park

Troy · San Francisco · New

Bloomington · Columbia

Chicago · Roseville · Phoenix

### Marks

- Filters
- Automatic
- Color · Size · Label
- Detail · Tooltip
- SUM(Sales)
- SUM(Sales)
- City

---

Columns

Rows: Customer Name

## CUSTOMER NAME STATE WISE

| Customer Name | |
|---|---|
| Alan Dominguez | Texas |
| Alejandro Grove | Utah |
| Andrew Allen | North Carolina |
| Brendan Sweed | Arizona |
| Brosina Hoffman | California |
| Christopher Schild | Illinois |
| Claire Gute | Kentucky |
| Clay Ludtke | Iowa |
| Cynthia Voltz | New York |
| Darren Powers | Indiana |
| Darrin Van Huff | California |
| Dave Kipp | Washington |
| Dorothy Wardle | Ohio |
| Duane Noonan | California |
| Elpida Rittenbach | Minnesota |
| Emily Burns | Utah |
| Eric Hoffmann | California |
| Erin Smith | Florida |
| Gary Mitchum | Texas |
| Gary Zandusky | Minnesota |
| Gene Hale | Texas |
| Greg Guthrie | Tennessee |
| Harold Pawlan | Texas |
| Henry MacAllister | New York |
| Irene Maddox | Washington |
| Janet Martin | North Carolina |

### Marks

- Pages
- Filters
- Automatic
- Color · Size · Text
- Detail · Tooltip
- State

**Visualizations Dashboard:**

## BAR CHART OF SUM OF SALES BY SUBCATEGORY
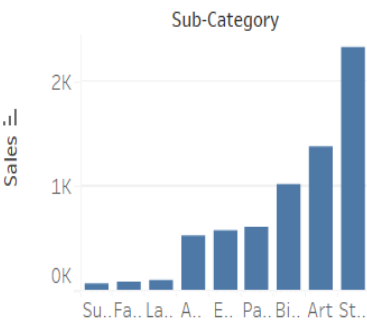
Sub-Category



## HEAT MAP OF SALES BY REGION AND SUB CATEGORY

| Sub-Catego.. | Central | East | South | West |
|---|---|---|---|---|
| Appliances | ▪ | | ▪ | ▪ |
| Art | ▪ | ▪ | ▪ | ■ |
| Binders | ▪ | ▪ | ▪ | ■ |
| Envelopes | | ▪ | ▪ | |
| Fasteners | | ▪ | | ▪ |
| Labels | ▪ | | | ▪ |
| Paper | ▪ | ▪ | ▪ | ▪ |
| Storage | ■ | ■ | ▪ | ▪ |
| Supplies | | | | ▪ |

Region

## HEATMAP OF SALES CITY WISE

| Los Angeles | Houston | New York |
|---|---|---|
| | Gilbert | |

## SUM OF SALES BY EACH CUSTOMER

Customer Name

| | |
|---|---|
| Brendan Sweed | |
| Christopher Schild | |
| Irene Maddox | |
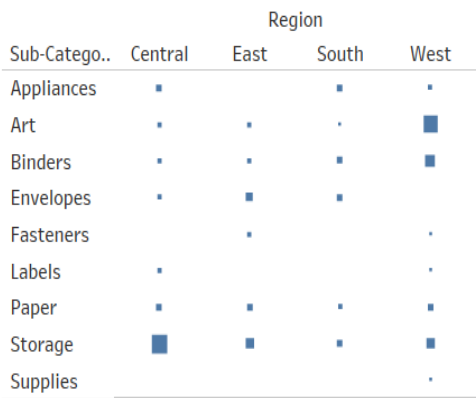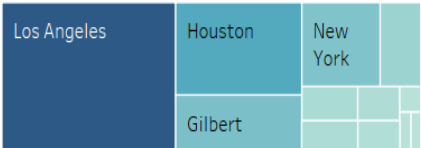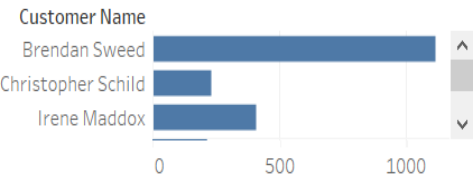
Sales

## HISTOGRAM OF SALES SUM



## PRODUCT NAME CITY WISE

| Product Name | |
|---|---|
| 1.7 Cubic Foot Compact ".. | Decatur |
| #10-4 1/8" x 9 1/2"" Pre.. | Houston |
| Acco Six-Outlet Power Str.. | Fremont |
| Advantus Push Pins | New York City |
| Atlantic Metals Mobile 3-.. | Houston |
| Avery 511 | Rochester |
| Bush Somerset Collection .. | Henderson |

## CUSTOMER NAME STATE WISE

| Customer N.. | |
|---|---|
| Alan Dominguez | Texas |
| Brendan Sweed | Arizona |
| Christopher | |

Sheet 2 | Sheet 3 | Sheet 4 | Sheet 5 | Sheet 6 | Sheet 7 | Sheet 8 | Sheet 9 | Sheet 10 | Sheet 11 | ⊞ Dashboard 1
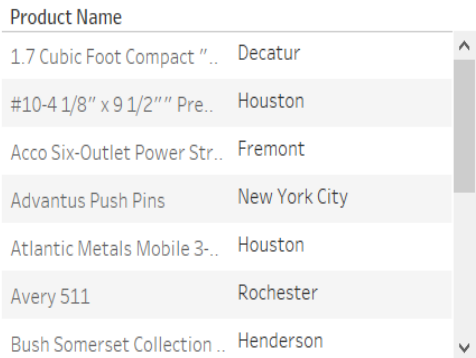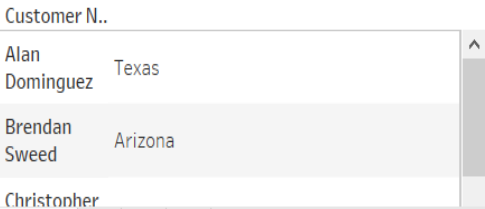
## 2. Dimensional filter:

## (I).

**Filter [Customer Name]**                                    ✕

| General | Wildcard | Condition | Top |
|---------|----------|-----------|-----|

◉ Select from list  ○ Custom value list  ○ Use all        ≡

Enter search text
- ☑ Alan Dominguez
- ☐ Alejandro Grove
- ☐ Andrew Allen
- ☑ Brendan Sweed
- ☐ Brosina Hoffman
- ☑ Christopher Schild
- ☐ Claire Gute
- ☐ Clay Ludtke
- ☐ Cynthia Voltz
- ☑ Darren Powers
- ☐ Darrin Van Huff

[ All ]  [ None ]                    ☐ Exclude

**Summary**
Field:      [Customer Name]
Selection:  Selected 12 of 64 values
Wildcard:   All
Condition:  None
Limit:      None

[ Reset ]          [ OK ]  [ Cancel ]  [ Apply ]

---

**Pages**

**Columns**

**Rows**  Customer Name

**Filters**
Customer Name

**Marks**

⊤ Automatic ▾

Color | Size | Text
Detail | Tooltip
⊤ State

### CUSTOMER NAME STATE WISE

| Customer N.. | |
|--------------|--|
| Alan Dominguez | Texas |
| Brendan Sweed | Arizona |
| Christopher Schild | Illinois |
| Darren Powers | Indiana |
| Emily Burns | Utah |
| Gary Mitchum | Texas |
| Henry MacAllister | New York |
| Irene Maddox | Washington |
| Janet Martin | North Carolina |
| Jonathan Doherty | Pennsylvania |
| Katherine Ducich | California |
| Linda Cazamias | Illinois |

Sheet 2 | Sheet 3 | Sheet 4 | Sheet 5 | Sheet 6 | Sheet 7

**(II).**

**Filter [Product Name]**                                                    ×

| General | Wildcard | Condition | Top |

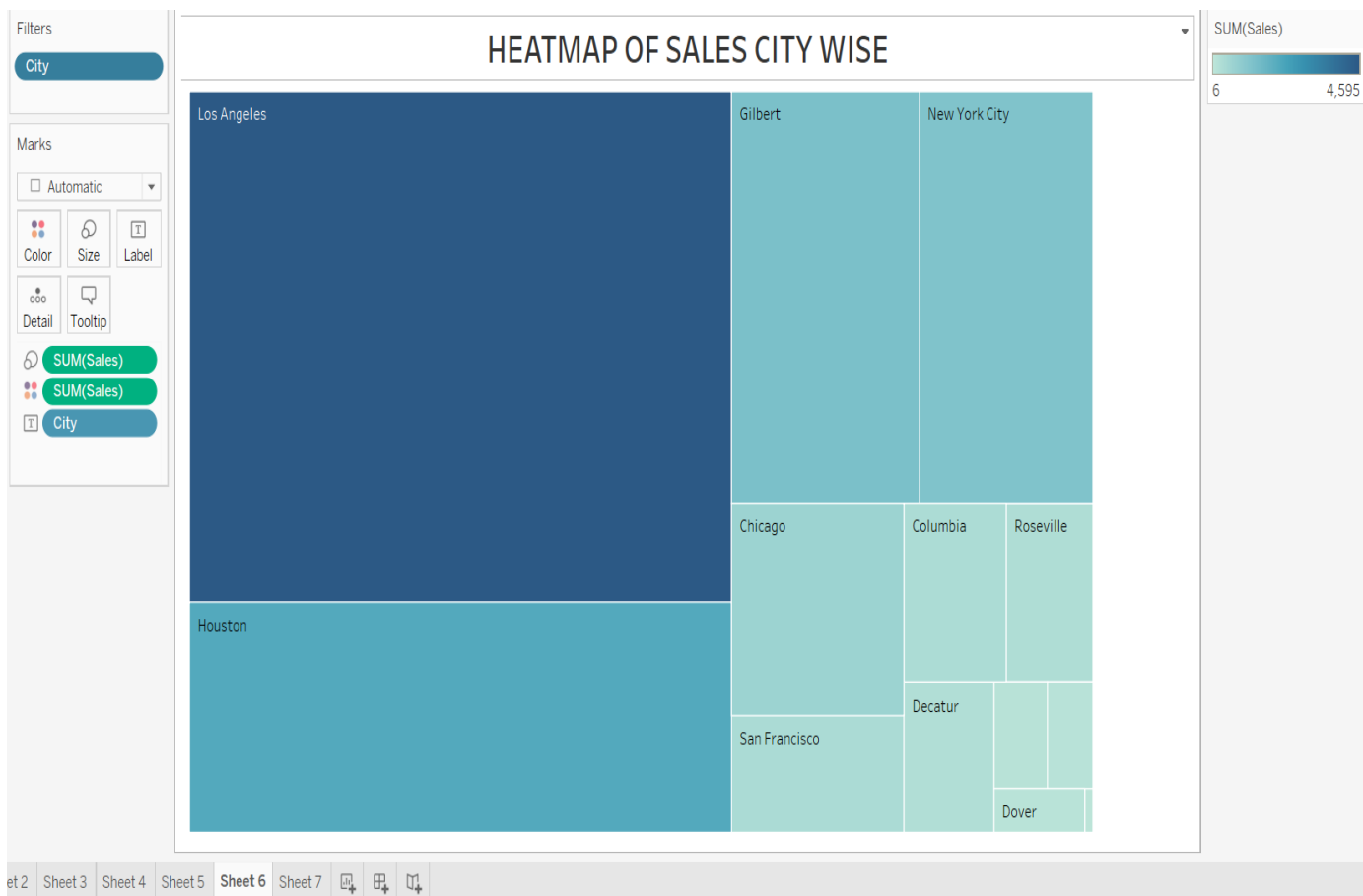◉ Select from list   ◯ Custom value list   ◯ Use all                    ☰

| Enter search text |
|---|
| ☑ 1.7 Cubic Foot Compact "Cube"" Office Refrigerators" |
| ☐ 9-3/4 Diameter Round Wall Clock |
| ☑ #10-4 1/8" x 9 1/2"" Premium Diagonal Seam Envelopes" |
| ☐ Acco PRESSTEX Data Binder with Storage Hooks, Dark Blue, 14 7/8" X ... |
| ☑ Acco Six-Outlet Power Strip, 4' Cord Length |
| ☐ Advantus 10-Drawer Portable Organizer, Chrome Metal Frame, Smoke ... |
| ☑ Advantus Push Pins |
| ☐ Anker 36W 4-Port USB Wall Charger Travel Power Adapter for iPhone 5... |
| ☐ Array Parchment Paper, Assorted Colors |
| ☐ Artistic Insta-Plaque |
| ☐ AT&T CL83451 4-Handset Telephone |

| All | None |          ☐ Exclude

**Summary**
Field:      [Product Name]
Selection:  Selected 17 of 132 values
Wildcard:   All
Condition:  None
Limit:      None

| Reset |          | OK | Cancel | Apply |

---

| Pages | | ⚏ Columns | |
|---|---|---|---|
| | | ☰ Rows | Product Name |

| Filters |
|---|
| Product Name ▾ |

**PRODUCT NAME CITY WISE**

| Product Name | |
|---|---|
| 1.7 Cubic Foot Compact "... | Decatur |
| #10-4 1/8" x 9 1/2"" Pre.. | Houston |
| Acco Six-Outlet Power Str.. | Fremont |
| Advantus Push Pins | New York City |
| Atlantic Metals Mobile 3-.. | Houston |
| Avery 511 | Rochester |
| Bush Somerset Collection .. | Henderson |
| Deflect-o DuraMat Lighwe.. | Aurora |
| DXL Angle-View Binders w.. | Los Angeles  Wilmington |
| Electrix Architect's Clamp.. | Richardson |
| Flexible Leather- Look Cla.. | Portland |
| GE 30524EE4 | Richardson |
| Hon Deluxe Fabric Uphols.. | Henderson |
| Ideal Clamps | Roseville |
| Jet-Pak Recycled Peel 'N' .. | Durham |
| Konftel 250 Conference... | Los Angeles |
| Logitech LS21 Speaker S.. | Rochester |

**Marks**

Automatic ▾

Color | Size | Text
Detail | Tooltip

City

| et 2 | Sheet 3 | Sheet 4 | Sheet 5 | Sheet 6 | Sheet 7 |

**(III).**

## Measure filter:

## (I).

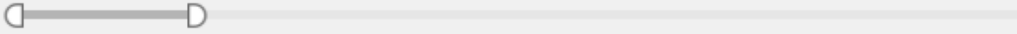**Filter Field [Sales]**  ✕

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 ]

---

**Filter [Sales]**  ✕

| Range of values | At least | At most | Special |
|---|---|---|---|

Range of values

| 0 | | 500 |
|---|---|---|

0                                    3083.43

Show: [ Only Relevant Values ▾ ]        ☐ Include Null Values
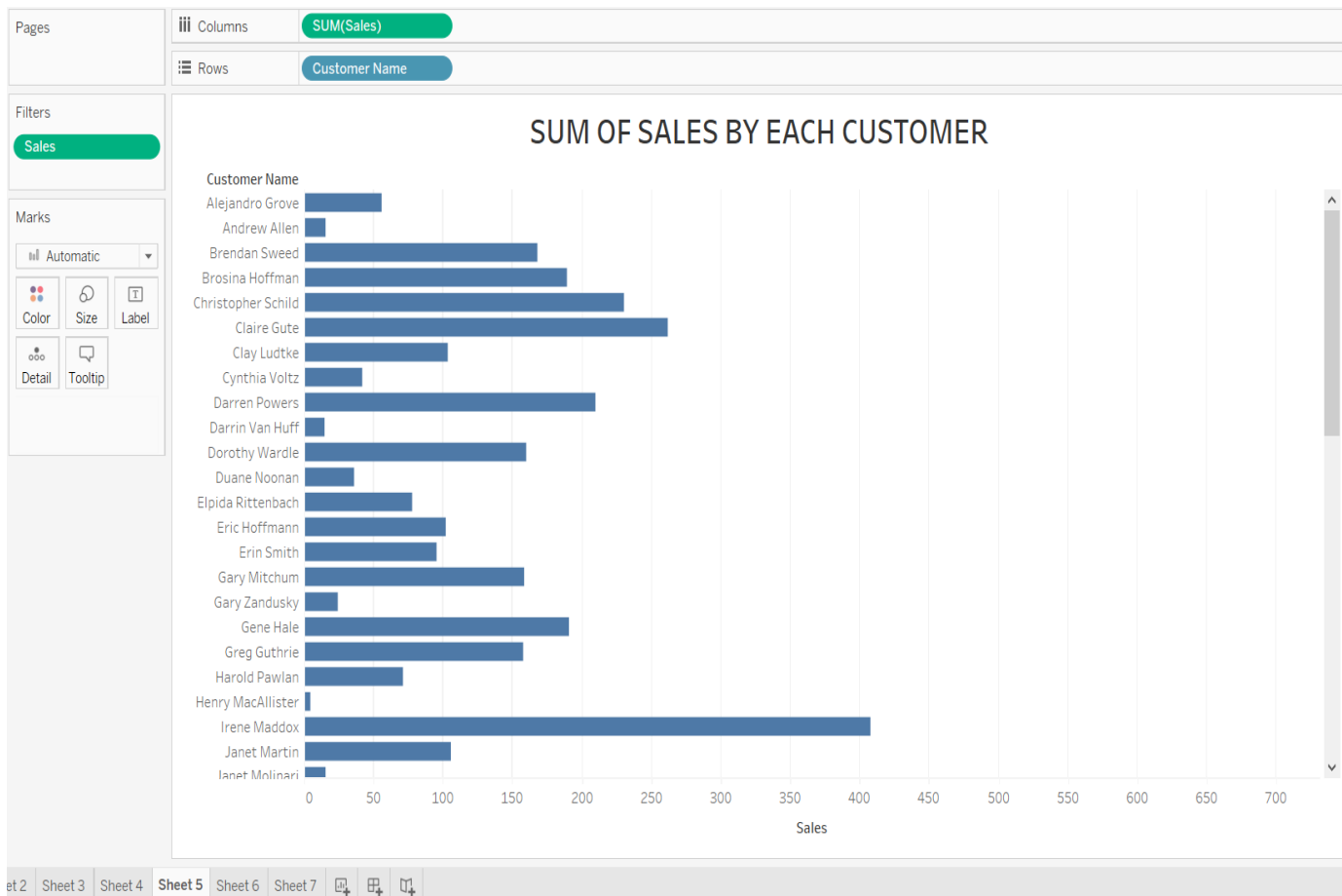
[ Reset ]          [ OK ]   [ Cancel ]   [ Apply ]

**(II).**

## BAR CHART OF SUM OF SALES BY SUBCATEGORY

**Sub-Category**

Pages

Columns  Sub-Category

Rows  SUM(Sales)

Filters
Sales

Marks
Automatic
Color  Size  Label
Detail  Tooltip

et 2  Sheet 3  Sheet 4  Sheet 5  Sheet 6  Sheet 7

**(III).**
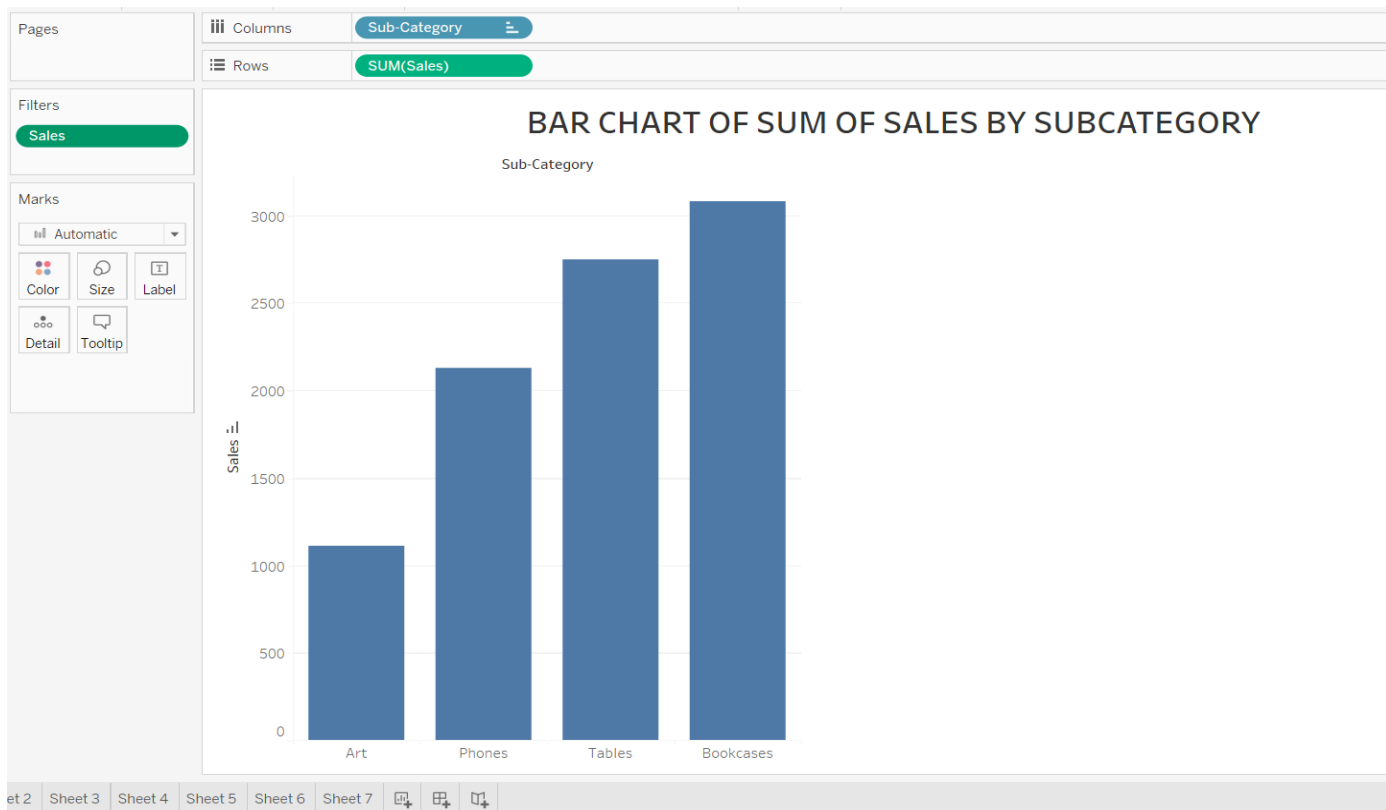

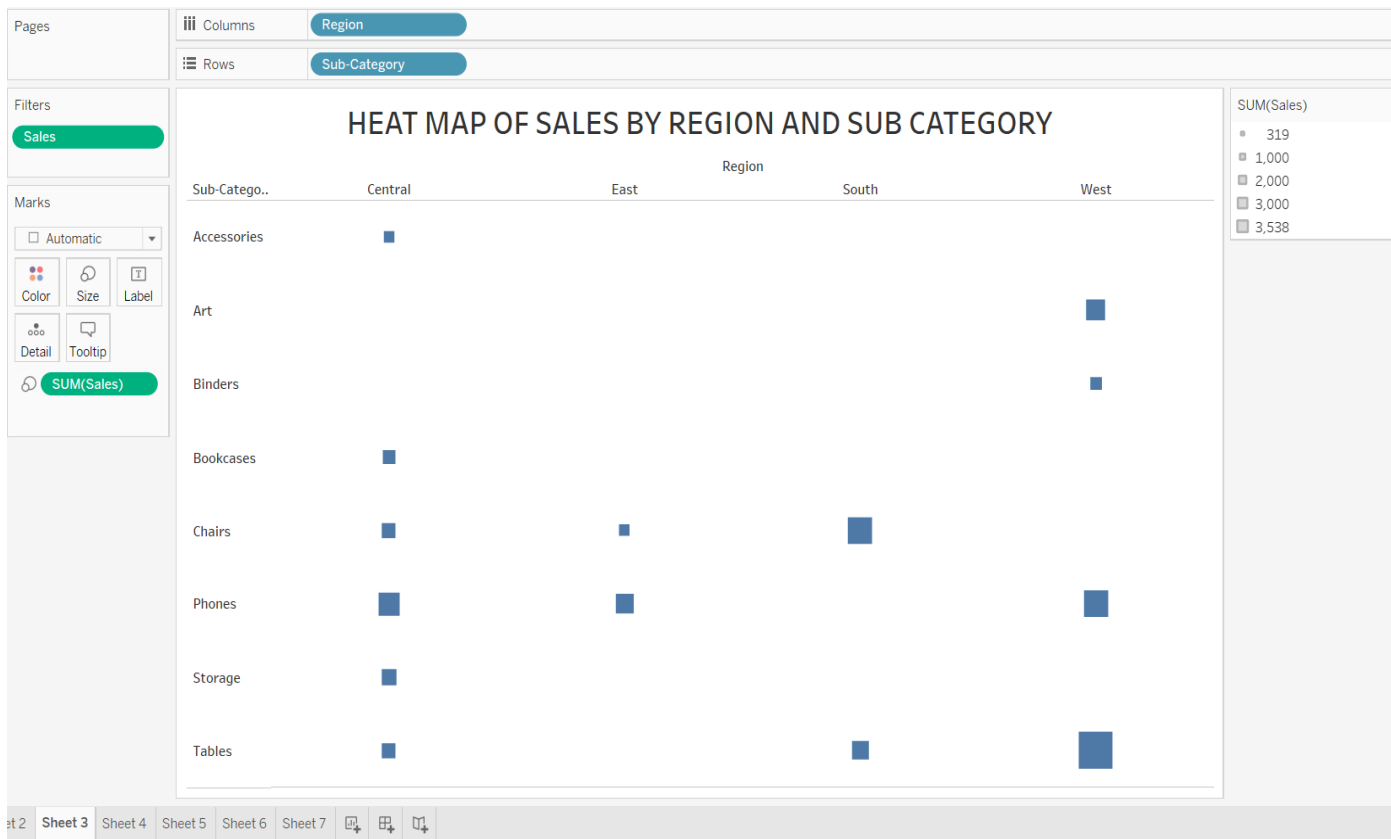
Filter [Sales]  ✕

Range of values | At least | At most | Special

Range of values

300  3,000

1.248  3083.43

Show:  Only Relevant Values  ☐ Include Null Values

Reset  OK  Cancel  Apply

## Context filter:

## (I).

## Filter [Category]                                                            ✕

| General | Wildcard | Condition | Top |

◉ Select from list  ○ Custom value list  ○ Use all                          ☰

```
Enter search text
  ☐ Furniture
  ☑ Office Supplies
  ☐ Technology
```
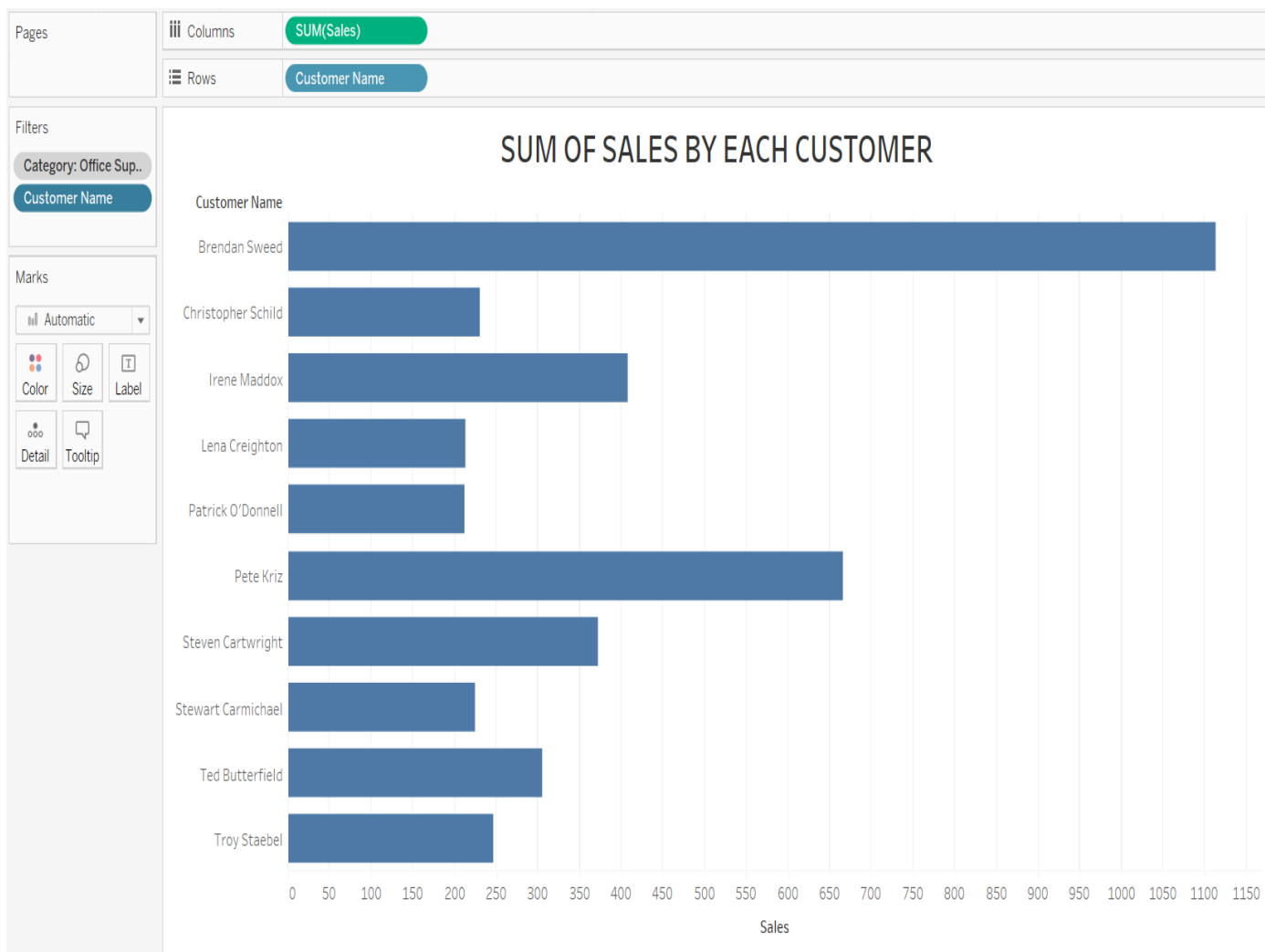
| All | None |                                              ☐ Exclude

**Summary**

Field:        [Category]
Selection:    Selected 1 of 3 values
Wildcard:     All
Condition:    None
Limit:        None

| Reset |                    | OK | | Cancel | | Apply |

---

Filters                                     ▼

**Category: Office ..**    ▼

**Edit Filter...**

Show Filter
Clear Filter
Add to Context
Apply to Worksheets          ▶

⊘  Create Set...

•  Dimension
   Attribute
   Measure                  ▶

   Remove

**(II).**

## Filter [Category]                                          ✕

| 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 |

---

Pages

| Columns | SUM(Sales) |
| Rows | Customer Name |

Filters
- Category: Office Sup..
- Customer Name

Marks

ıl Automatic ▾

Color  Size  Label
Detail  Tooltip

### SUM OF SALES BY EACH CUSTOMER



Customer Name

Brendan Sweed
Christopher Schild
Irene Maddox
Lena Creighton
Patrick O'Donnell
Pete Kriz
Steven Cartwright
Stewart Carmichael
Ted Butterfield
Troy Staebel

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

**(III).**

Filter [Sub-Category]                                              ✕

| General | Wildcard | Condition | Top |

◯ None

⬤ By field:

| Top ▼ | 10 ▼ | by |

| Sales ▼ | Sum ▼ |

◯ By formula:

| Top ▼ | 10 ▼ | by |

| Reset |          | OK | Cancel | Apply |

---

Filter [Category]                                                  ✕

| 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 |

**3.**
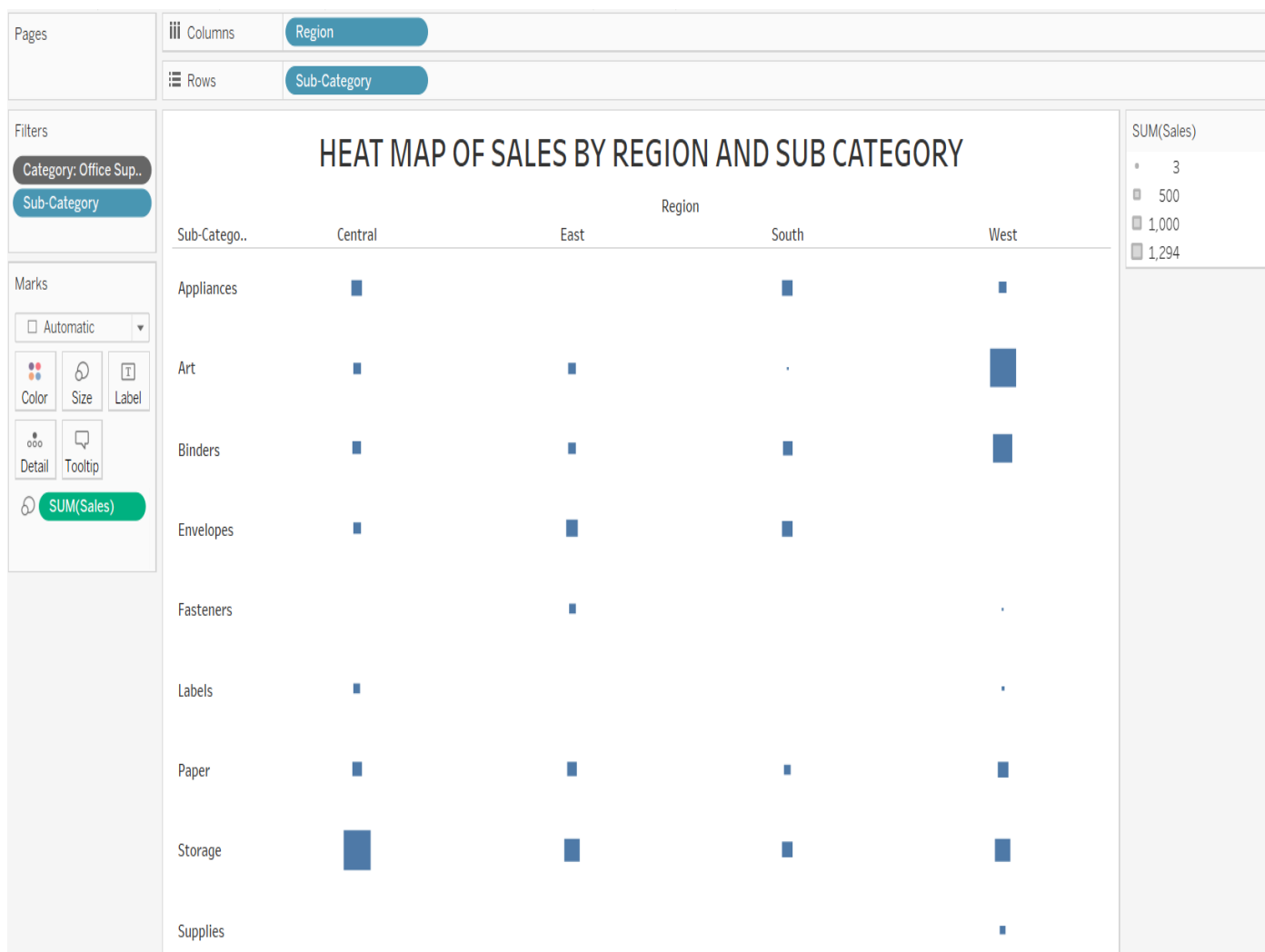
**(I). Hierarchy:**
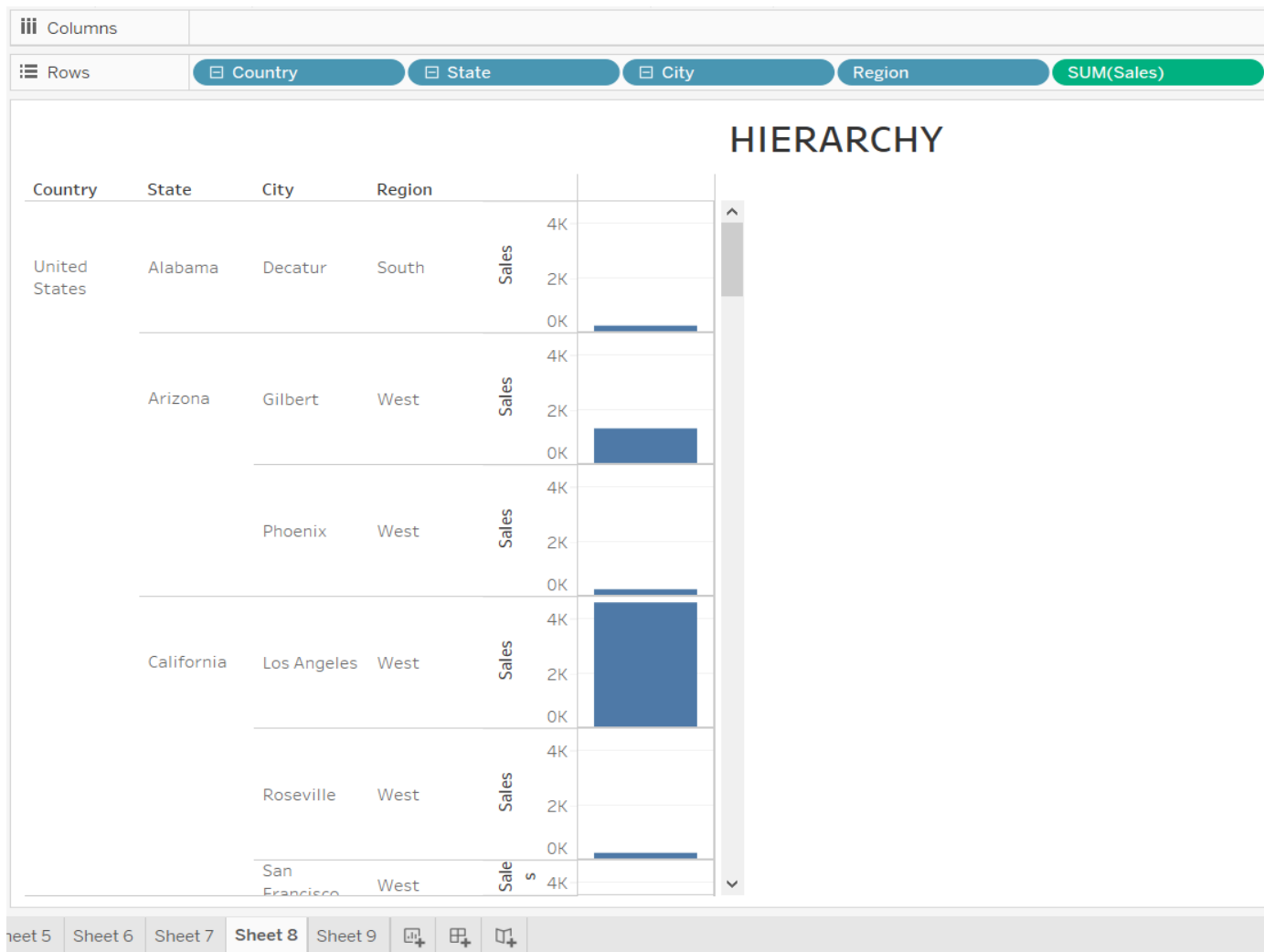
# (II). Set:

# Dynamic Set:

## DYNAMIC SET
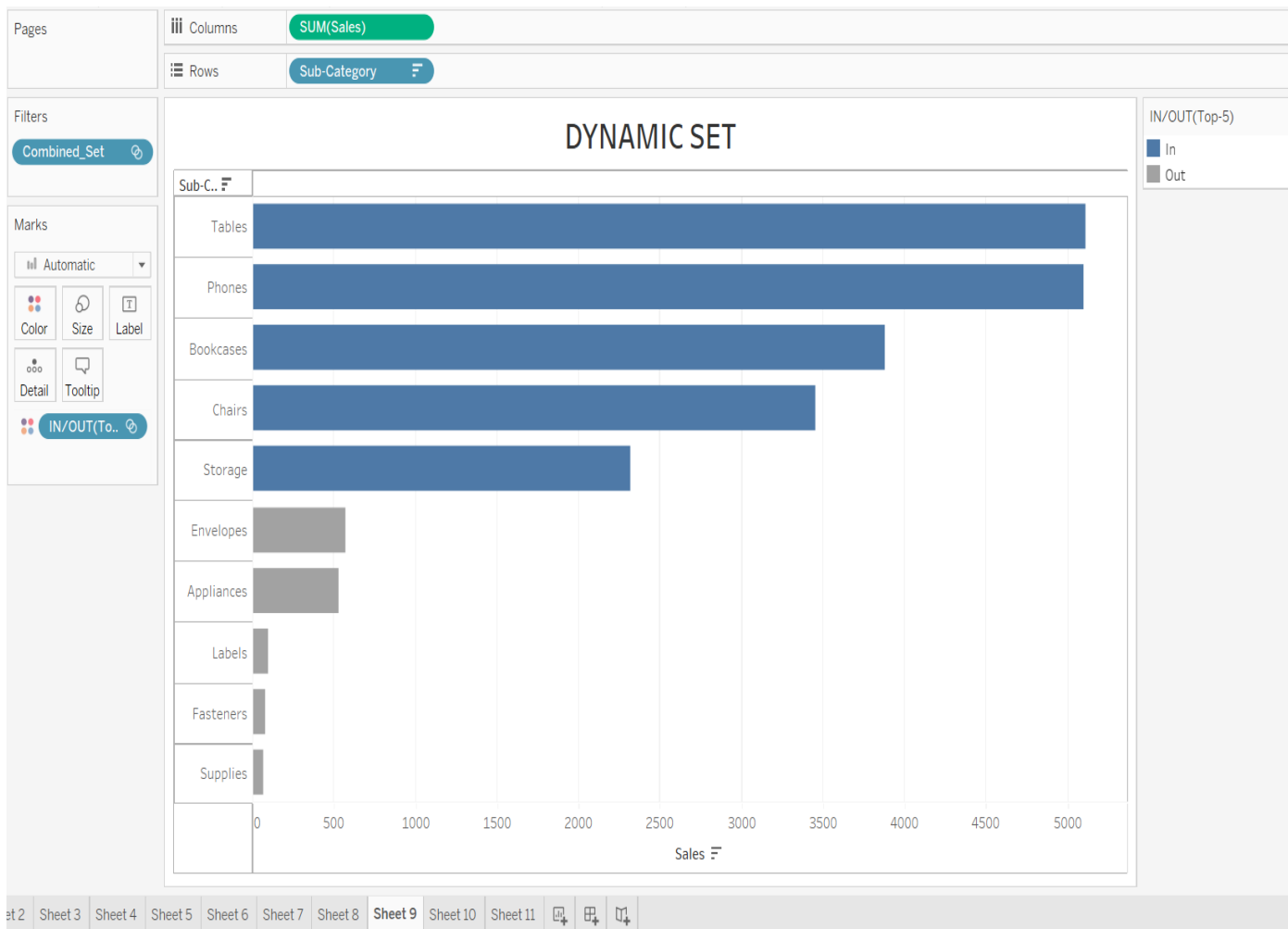
**Fixed Set:**



Profit_Ratio

sum([Profit])/sum([Sales])

The calculation is valid.     1 Dependency ▾     Apply     OK

# (III). Group:

# SUB CATEGORY GROUP

Sub-Category (group)