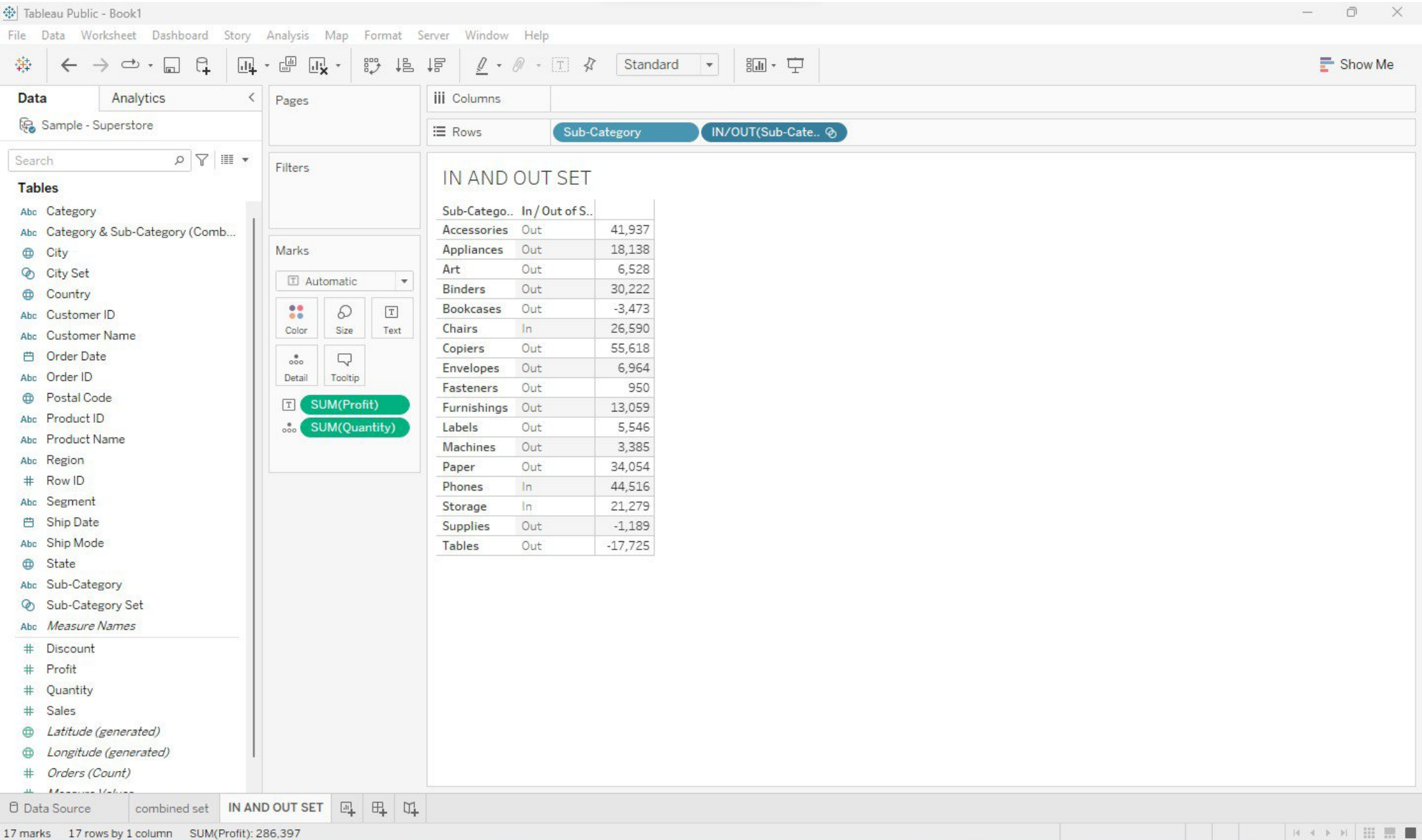# Combined set

- In the following combined set I combined category and sub category using sets
- Then the combined set field is created
- That is taken in rows
- Dragged sales to text for sales in table

File   Data   Worksheet   Dashboard   Story   Analysis   Map   Format   Server   Window   Help

Standard ▼   ≣ Show Me

Data   **Analytics**   ‹

Sample - Superstore

Search   ⌕ ▽ ▦ ▼

Tables

Abc Category
Abc Category & Sub-Category (Combine...
⊕ City
⊕ Country
Abc Customer ID
Abc Customer Name
⊟ Order Date
Abc Order ID
⊕ Postal Code
Abc Product ID
Abc Product Name
Abc Region
Row ID
Abc Segment
⊟ Ship Date
Abc Ship Mode
⊕ State
Abc Sub-Category
Abc *Measure Names*

Discount
Profit
Quantity
Sales
⊕ *Latitude (generated)*
⊕ *Longitude (generated)*
Orders (Count)
Measure Values

Pages

Filters

Marks

⊤ Automatic ▼

Color	Size	Text
Detail	Tooltip	

⊤ SUM(Sales)

iii **Columns**

≣ **Rows**   Category & Sub-C.. ⬚

combined set

Category & Sub-Category ..	
Technology, Phones	330,007
Furniture, Chairs	328,449
Office Supplies, Storage	223,844
Furniture, Tables	206,966
Office Supplies, Binders	203,413
Technology, Machines	189,239
Technology, Accessories	167,380
Technology, Copiers	149,528
Furniture, Bookcases	114,880
Office Supplies, Appliances	107,532
Furniture, Furnishings	91,705
Office Supplies, Paper	78,479
Office Supplies, Supplies	46,674
Office Supplies, Art	27,119
Office Supplies, Envelopes	16,476
Office Supplies, Labels	12,486
Office Supplies, Fasteners	3,024

⊟ Data Source   combined set

17 marks   17 rows by 1 column   SUM(Sales): 2,297,201

In and out set

- In the following in and out set I created set of sub category

- In create set I have used condition and top

- Taken sub category and created set in rows

- The table shows top 3 as in and others as out

IN AND OUT SET

Sub-Catego..	In / Out of S..	
Accessories	Out	41,937
Appliances	Out	18,138
Art	Out	6,528
Binders	Out	30,222
Bookcases	Out	-3,473
Chairs	In	26,590
Copiers	Out	55,618
Envelopes	Out	6,964
Fasteners	Out	950
Furnishings	Out	13,059
Labels	Out	5,546
Machines	Out	3,385
Paper	Out	34,054
Phones	In	44,516
Storage	In	21,279
Supplies	Out	-1,189
Tables	Out	-17,725

- As joins means combination of data from different tables or even different data sources
- In the following union, intersection and left join
- I have combined one data source data and another data source
- In union both data sources, in intersection the common data in both, in left join data of first data source and common data of two data sources

Calculation field 1

- In the following calculation field I have created calculation using profit and discount

- Taken profit and discount in columns to show profit and discount of products

- Taken product name in rows to show product names

- Dragged created calculation field in labels so that it labels to both discount and profit to each product

File   Data   Worksheet   Dashboard   Story   Analysis   Map   Format   Server   Window   Help

Standard   ▼   Show Me

Data   Analytics

Sample - Superstore

Search

Tables

=Abc Calculation2
=Abc Calculation3
Abc Category
Abc Category & Sub-Category (Comb...
⊕ City
⊘ City Set
⊕ Country
Abc Customer ID
Abc Customer Name
🗓 Order Date
Abc Order ID
⊕ Postal Code
Abc Product ID
Abc Product Name
Abc Region
Abc Segment
🗓 Ship Date
Abc Ship Mode
⊕ State
Abc Sub-Category
⊘ Sub-Category Set
Abc *Measure Names*
=# Calculation1
Discount
Profit
Quantity
Row ID
Sales

Pages

Columns   SUM(Profit)   SUM(Discount)

Rows   Product Name

Filters

Product ID

Product Name

Marks

▭ **All**

▭ Automatic   ▼

Color   Size   Label

Detail   Tooltip

∷ SUM(Calculati..
T SUM(Calculati..

▭ SUM(Profit)

▭ SUM(Discount)

CALCULATION FIELD 1

Product Name	Profit	Discount
3D Systems Cube Printer, ..	3,718	3,718
Adjustable Depth Letter/L..	1,932	1,932
Apple iPhone 5	1,610	1,610
Ativa V4110MDD Micro-C..	3,773	3,773
Atlantic Metals Mobile 3-..	779	779
Bady BDG101FRU Card Pri..	1,327	1,327
Bose SoundLink Bluetooth..	966	966
Brother DCP1000 Digital ..	1,154	1,154
Canon Image Class D660 C..	1,692	1,692
Canon imageCLASS 2200 ..	25,199	25,199
Canon Imageclass D680 C..	2,799	2,799
Canon imageCLASS MF74..	1,996	1,996
Canon PC940 Copier	2,092	2,092
Canon PC1060 Personal La..	4,570	4,570
Canon PC1080F Personal ..	1,974	1,974
Canon PC-428 Personal Co..	1,469	1,469
Cisco SPA301	903	903
ClearOne CHATAttach 160..	1,053	1,053
Deluxe Rollaway Locking F..	1,380	1,380
Dot Matrix Printer Tape R..	1,518	1,518
Dual Level, Single-Width F..	1,640	1,640
Fellowes PB300 Plastic Co..	2,517	2,517
Fellowes PB500 Electric P..	7,751	7,751
Fellowes Powershred HS-..	1,092	1,092
GBC DocuBind 200 Manua..	1,051	1,051
GBC DocuBind TL300 Man..	1,591	1,591

Profit axis: 0K 5K 10K 15K 20K 25K 30K

Discount axis: 0 1 2 3 4 5

ENG IN   16:00   01-03-2024

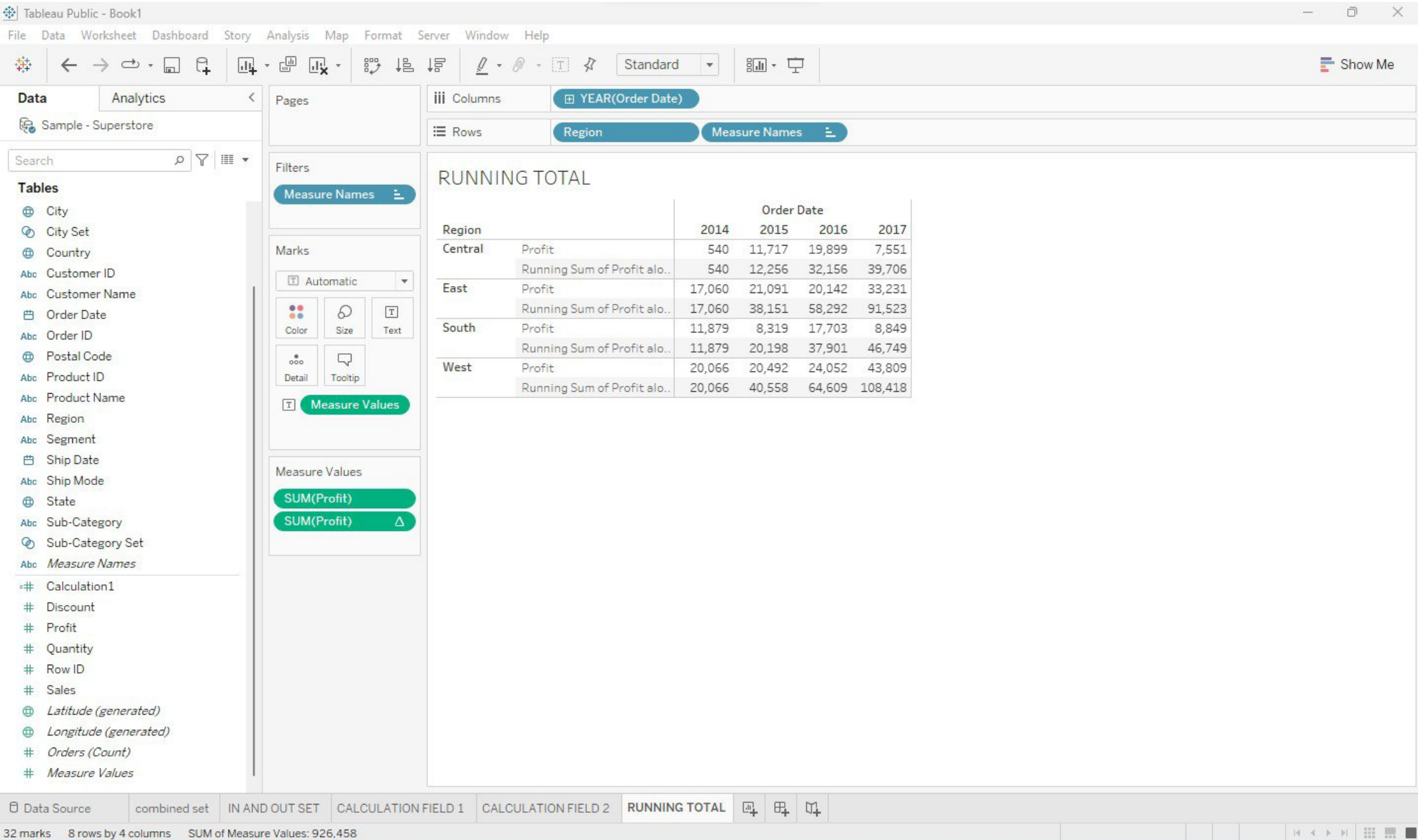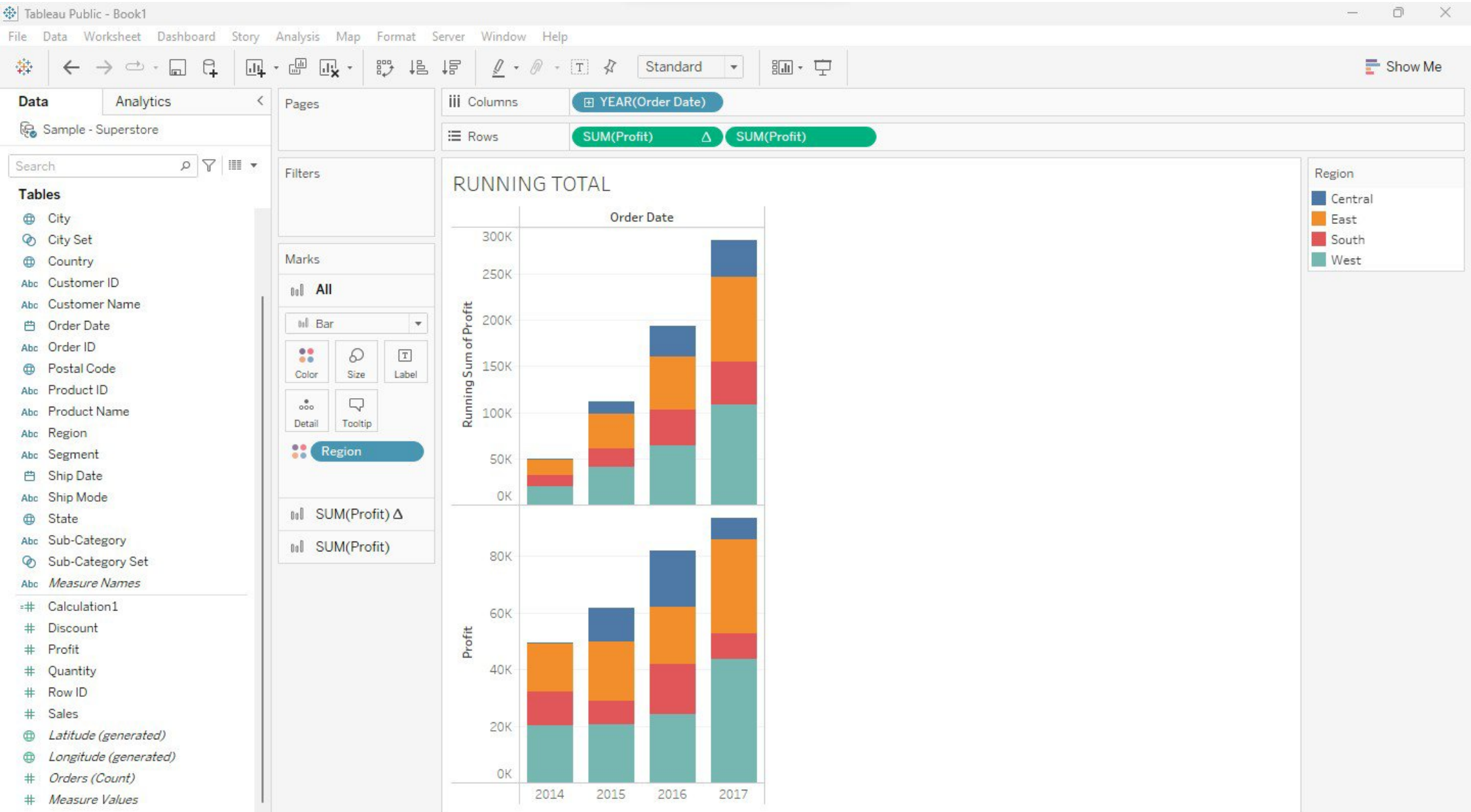## Calculation field 2

- In the following calculation field 2 I have created calculation field by If[profit]>0 then "profit" else "loss" end calculation

- Taken product name and created calculation field in rows to show either profit or loss of each product

- Dragged profit in text for profit values in table

- By this table we can see which product has profit and which has loss clearly

File   Data   Worksheet   Dashboard   Story   Analysis   Map   Format   Server   Window   Help

Standard ▾   ≡ Show Me

Data   Analytics   ‹

🗄 Sample - Superstore

Search   🔍 ▽ ⊞ ▾

Tables

=Abc Calculation2
=Abc Calculation3
Abc Category
Abc Category & Sub-Category (Comb...
⊕ City
⊘ City Set
⊕ Country
Abc Customer ID
Abc Customer Name
📅 Order Date
Abc Order ID
⊕ Postal Code
Abc Product ID
Abc Product Name
Abc Region
Abc Segment
📅 Ship Date
Abc Ship Mode
⊕ State
Abc Sub-Category
⊘ Sub-Category Set
Abc *Measure Names*
=# Calculation1
Discount
Profit
Quantity
Row ID
Sales

Pages

Filters

Product Name

Marks

⊤ Automatic   ▾

⬤ Color   ◯ Size   ⊤ Text

⠿ Detail   ⬚ Tooltip

⊤ SUM(Profit)

iii Columns

≡ Rows   Product Name   Calculation3

CALCULATION FIELD 2

Product Name	Calculation3	
3D Systems Cube Printer, ..	PROFIT	3,718
Adjustable Depth Letter/L..	PROFIT	1,933
Apple iPhone 5	LOSS	-422
	PROFIT	2,034
Ativa V4110MDD Micro-C..	PROFIT	3,773
Atlantic Metals Mobile	LOSS	-350
3-Shelf Bookcases, Custo..	PROFIT	1,130
Bady BDG101FRU Card	LOSS	-264
Printer	PROFIT	1,592
Bose SoundLink Bluetoot..	PROFIT	967
Brother DCP1000 Digital ..	PROFIT	1,155
Canon Image Class D660 C..	PROFIT	1,692
Canon imageCLASS 2200 ..	PROFIT	25,200
Canon Imageclass D680 C..	PROFIT	2,800
Canon imageCLASS MF74..	PROFIT	1,996
Canon PC940 Copier	PROFIT	2,092
Canon PC1060 Personal L..	PROFIT	4,571
Canon PC1080F Personal ..	PROFIT	1,974
Canon PC-428 Personal Co..	PROFIT	1,470
Cisco SPA301	LOSS	-47
	PROFIT	952
ClearOne CHATAttach 160 -	LOSS	-124
speaker phone	PROFIT	1,178
Deluxe Rollaway Locking ..	PROFIT	1,381
Dot Matrix Printer Tape R..	PROFIT	1,518
Dual Level, Single-Width F..	PROFIT	1,641
Easy-staple paper	PROFIT	1,096
Fellowes PB300 Plastic	LOSS	-512

Data Source   combined set   IN AND OUT SET   CALCULATION FIELD 1   **CALCULATION FIELD 2**

136 marks   136 rows by 1 column   SUM(Profit): 189,145

Running total

- In the following running total I have used quick table calculation
- Dragged profit to marks and selected quick table calculation -> running total by right clicking
- Taken order date in columns and region to show running total of profit and profit of each region and year
- Taken profit also to show profit in table

File   Data   Worksheet   Dashboard   Story   Analysis   Map   Format   Server   Window   Help

Data   **Analytics**

Sample - Superstore

Search

Tables

- City
- City Set
- Country
- Abc Customer ID
- Abc Customer Name
- Order Date
- Abc Order ID
- Postal Code
- Abc Product ID
- Abc Product Name
- Abc Region
- Abc Segment
- Ship Date
- Abc Ship Mode
- State
- Abc Sub-Category
- Sub-Category Set
- Abc *Measure Names*
- Calculation1
- # Discount
- # Profit
- # Quantity
- # Row ID
- # Sales
- *Latitude (generated)*
- *Longitude (generated)*
- # *Orders (Count)*
- # *Measure Values*

Pages

Filters

Measure Names

Marks

Automatic

Color   Size   Text

Detail   Tooltip

Measure Values

Measure Values

SUM(Profit)

SUM(Profit)   Δ

Columns   ⊞ YEAR(Order Date)

Rows   Region   Measure Names

RUNNING TOTAL

Region		Order Date			
		2014	2015	2016	2017
Central	Profit	540	11,717	19,899	7,551
	Running Sum of Profit alo..	540	12,256	32,156	39,706
East	Profit	17,060	21,091	20,142	33,231
	Running Sum of Profit alo..	17,060	38,151	58,292	91,523
South	Profit	11,879	8,319	17,703	8,849
	Running Sum of Profit alo..	11,879	20,198	37,901	46,749
West	Profit	20,066	20,492	24,052	43,809
	Running Sum of Profit alo..	20,066	40,558	64,609	108,418

Data Source   combined set   IN AND OUT SET   CALCULATION FIELD 1   CALCULATION FIELD 2   **RUNNING TOTAL**

32 marks   8 rows by 4 columns   SUM of Measure Values: 926,458

Difference

- In the following difference table I have used quick table calculation to find the difference in quantity from previous year

- First taken quantity->right click ->quick table calculation ->difference

- Taken measure names in columns and order date in rows

- Quantity also taken in table to show the difference in quantity and quantity in same table

File   Data   Worksheet   Dashboard   Story   Analysis   Map   Format   Server   Window   Help

Data   Analytics

Sample - Superstore

Search

Tables

- City
- City Set
- Country
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Sub-Category Set
- Measure Names
- Calculation1
- Discount
- Profit
- Quantity
- Row ID
- Sales
- Latitude (generated)
- Longitude (generated)
- Orders (Count)
- Measure Values

Pages

Columns   Measure Names

Rows   ⊞ YEAR(Order Date)

Filters

Measure Names

Marks

Automatic

Color   Size   Text

Detail   Tooltip

Measure Values

Measure Values

SUM(Quantity)

SUM(Quantity)   Δ

DIFFERENCE

Year of Order Date	Quantity	Difference in Quantity from the Previous along Table (Do..
2014	7,581	
2015	7,979	398
2016	9,837	1,858
2017	12,476	2,639

Data Source   combined set   IN AND OUT SET   CALCULATION FIELD 1   CALCULATION FIELD 2   RUNNING TOTAL   **DIFFERENCE**

8 marks   4 rows by 2 columns   SUM of Measure Values: 42,768
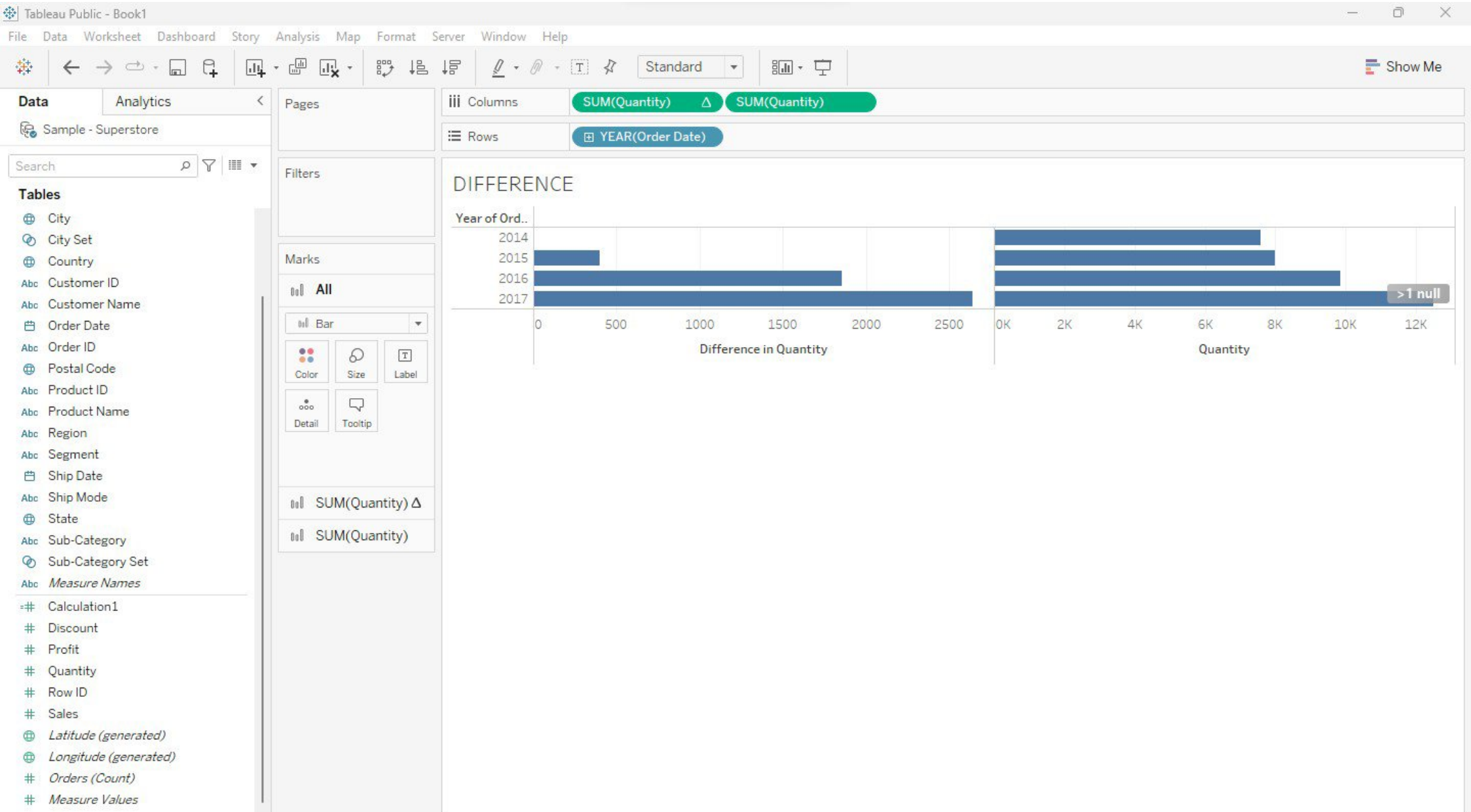
RANK

- In the following rank I have used quick table calculation to show the rank sales of each city

- Sales ->right click ->quick table calculation ->rank

- Taken measure names in columns and city in rows

- In this I have used sorting so that ranks start from one.

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Standard

Show Me

Data | Analytics

Sample - Superstore

Search

Tables

- City
- City Set
- Country
- Abc Customer ID
- Abc Customer Name
- Order Date
- Abc Order ID
- Postal Code
- Abc Product ID
- Abc Product Name
- Abc Region
- Abc Segment
- Ship Date
- Abc Ship Mode
- State
- Abc Sub-Category
- Sub-Category Set
- Abc *Measure Names*
- Calculation1
- # Discount
- # Profit
- # Quantity
- # Row ID
- # Sales
- *Latitude (generated)*
- *Longitude (generated)*
- # *Orders (Count)*
- # *Measure Values*

Pages

Filters

Measure Names

Marks

Automatic

Color Size Text

Detail Tooltip

Measure Values

Measure Values

SUM(Sales) Δ

SUM(Sales)

Columns Measure Names

Rows City

RANK

City	Rank of Sales along Tabl..	Sales
New York City	1	256,368
Los Angeles	2	175,851
Seattle	3	119,541
San Francisco	4	112,669
Philadelphia	5	109,077
Houston	6	64,505
Chicago	7	48,540
San Diego	8	47,521
Jacksonville	9	44,713
Springfield	10	43,054
Detroit	11	42,447
Columbus	12	38,706
Newark	13	28,576
Columbia	14	25,283
Lafayette	15	25,036
Jackson	16	24,964
San Antonio	17	21,844
Burlington	18	21,668
Arlington	19	20,215
Dallas	20	20,132
Lakewood	21	18,192
Richmond	22	18,138
Henderson	23	17,549
Atlanta	24	17,198
Minneapolis	25	16,871
Providence	26	15,981
Charlotte	27	13,693
Long Beach	28	13,455

Data Source | combined set | IN AND OUT SET | CALCULATION FIELD 1 | CALCULATION FIELD 2 | RUNNING TOTAL | DIFFERENCE | RANK

1062 marks   531 rows by 2 columns   SUM of Measure Values: 2,438,445

ENG IN   16:22   01-03-2024