

# Tableau Misc 4

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[Business problem 1 -find percentage of total sales made per month for each year](#)

[Business problem 2-find percentage of total sales done across different categories for each quarter of the given year](#)

Agenda:

- Indexing
- Partitioning
- Tooltip
- Reference Line
- Trend Line

Dataset used for the class:

 [Sample - Superstore-Main.xlsx](#)

Quick Table function	Business Use case
Running total	Sales org where they want to calculate sales till date/quarter
Difference	Comparative growth : year on year sales, day to day sales
Percent of difference	Year on year growth percentage or day to day

Rank	When we have to do comparison across all data points: best performing region, most revenue earning business division
Moving average	Metric smoothening, minimizing impact of one outlier/erroneous data point

### Table Calculation:

Quick table calculations allow you to quickly apply a common table calculation to your visualization using the most typical settings for that calculation type.

### Understanding Various table calculations in Tableau:

- Step-1: Create a view by dragging category and subcategory to rows

The screenshot shows the Tableau interface with the following details:

- Top Bar:** Tableau Public - Book1, File, Data, Worksheet, Dashboard, Story, Analysis, Map, Format, Server, Window, Help.
- Left Panel (Data View):**
  - Tables section: Category, City, Country/Region, Customer ID, Customer Name, Order Date, Order ID, Postal Code, Product ID, Product Name, Region, Row ID, Segment, Ship Date, Ship Mode, State, Sub-Category, Measure Names (Discount, index, Profit, Quantity, Sales).
  - Measures section: Latitude (generated).
- Center Panel:**
  - Pages section: Shows 'Sheet 1'.
  - Filters section: Empty.
  - Marks section: Automatic, Color, Size, Text, Detail, Tooltip.
  - Rows section: Category (selected), Sub-Category.
- Sheet 1 View:**

Category	Sub-Catego..	Abc
Furniture	Bookcases	Abc
	Chairs	Abc
	Furnishings	Abc
	Tables	Abc
Office Supplies	Appliances	Abc
	Art	Abc
	Binders	Abc
	Envelopes	Abc
	Fasteners	Abc
	Labels	Abc
	Paper	Abc
	Storage	Abc
	Supplies	Abc
Technology	Accessories	Abc
	Copiers	Abc
	Machines	Abc
	Phones	Abc
- Bottom Panel:** Data Source (selected), Sheet 1, Sheet 2, 17 marks, 17 rows by 1 column, various icons for search, file, calendar, etc., and a timestamp 11:13 PM 2/27/2023.

- Step-2: Drag sales to text Mark

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns Rows Category Sub-Category

Orders (Sample - Supers...)

Search

Tables

- Category
- City
- Country/Region
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names
- Discount
- index
- Profit
- Quantity
- Sales
- Latitude (generated)

Filters

Marks

Automatic

Color Size Text

Detail Tooltip

Sum(Sales)

Sheet 1

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

Data Source Sheet 1 Sheet 2

17 marks 17 rows by 1 column SUM(Sales): 2,297.201

11:14 PM 2/27/2023

### Step-3: We will now use the Quick table calculations

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns Rows Category Sub-Category

Orders (Sample - Supers...)

Search

Tables

- Category
- City
- Country/Region
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names
- Discount
- index
- Profit
- Quantity
- Sales
- Latitude (generated)

Filters

Marks

Automatic

Color Size Text

Detail Tooltip

Sum(Sales)

Sales

Sheet 1

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

Click on the white dropdown

Data Source Sheet 1 Sheet 2

17 marks 17 rows by 1 column SUM(Sales): 2,297.201

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns Rows Category Sub-Category

Orders (Sample - Supers... Search

Tables

- Category
- City
- Country/Region
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names
- Discount
- index
- Profit
- Quantity
- Sales
- Latitude (generated)

Marks Automatic Color Size Text Detail Tooltip SUM(Sales) Filter... Show Filter Format... Include in Tooltip Dimension Attribute Measure (Sum) Discrete Continuous Edit in Shelf Add Table Calculation... Quick Table Calculation ▾ Running Total Difference Percent Difference Percent of Total Rank Percentile Moving Average YTD Total Compound Growth Rate Year Over Year Growth YTD Growth

Sheet 1

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

17 marks 17 rows by 1 column SUM(Sales) Remove

Data Source Sheet 1 Sheet 2 11:17 PM 2/27/2023

### Step-3: We can now see the cumulative SUM

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns Rows Category Sub-Category

Orders (Sample - Supers... Search

Tables

- Category
- City
- Country/Region
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names
- Discount
- index
- Profit
- Quantity
- Sales
- Latitude (generated)

Marks Automatic Color Size Text Detail Tooltip SUM(Sales) ▾

Sheet 1

Category	Sub-Catego..	
Furniture	Bookcases	114,880
	Chairs	443,329
	Furnishings	535,034
	Tables	742,000
Office Supplies	Appliances	849,532
	Art	876,651
	Binders	1,080,063
	Envelopes	1,096,540
	Fasteners	1,099,564
	Labels	1,112,050
	Paper	1,190,530
	Storage	1,414,373
	Supplies	1,461,047
Technology	Accessories	1,628,427
	Copiers	1,777,955
	Machines	1,967,194
	Phones	2,297,201

17 marks 17 rows by 1 column Running Sum of SUM(Sales): 19,686,371 11:17 PM 2/27/2023

- Step-3: Drag the sales column again to “Text” Mark and you can see actual sales and cumulative sales

The screenshot shows a Tableau Public dashboard titled "Tableau Public - Book1". The interface is divided into several panes:

- Data Pane:** Lists various dimensions and measures: Category, City, Country/Region, Customer ID, Customer Name, Order Date, Order ID, Postal Code, Product ID, Product Name, Region, Row ID, Segment, Ship Date, Ship Mode, State, Sub-Category, and Measure Names.
- Analytics Pane:** Contains sections for "Measure Names", "Marks" (with options for Automatic, Color, Size, and Text), and "Measure Values" (with buttons for SUM(Sales) and SUM(Sales) Δ).
- Sheet 1:** Displays a data table with columns: Category, Sub-Catego.., Sales, and Running Sum of Sal.. The data is grouped by Category (Furniture, Office Supplies, Technology) and Sub-Category. The Furniture category has 4 rows, Office Supplies has 9 rows, and Technology has 5 rows. The running sum is calculated for each row.
- Bottom Status Bar:** Shows the number of marks (34), the number of rows and columns (17 rows by 2 columns), the sum of measure values (21,983,572), and the system time (11:28 PM on 2/27/2023).

- Now let's say we want to restart cumulative calculation at the start of each category. We can achieve this by following steps:
- Step-4: Click on the drop-down of sales with calculated field and go to “Compute Using” and then select “Pane Down”

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns Measure Names

Orders (Sample - Supers... Rows Category Sub-Category

Search

Tables

- Category
- City
- Country/Region
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names
- Discount
- Index
- Profit
- Quantity
- Sales
- Latitude (generated)

Data Source Sheet1 Sheet2

34 marks 17 rows by 2 columns SUM

Marks

Measure Values

Measure Values

Filter... Show Filter Format... Include in Tooltip Attribute Measure (Sum) Edit in Shelf Compute Using

- Table (down)
- Pane (down) **Pane (down)**
- Pane (across then down)
- Pane (down then across)
- Cell
- Category
- Sub-Category

Remove

Sheet 1

Category	Sub-Catego...	Sales	Running Sum of Sal..
Furniture	Bookcases	114,880	114,880
	Chairs	328,449	443,329
	Furnishings	91,705	535,034
	Tables	206,966	742,000
Office Supplies	Appliances	107,532	849,532
	Art	27,119	876,651
	Binders	203,413	1,080,063
	Envelopes	16,476	1,096,540
	Fasteners	3,024	1,099,564
	Labels	12,486	1,112,050
	Paper	78,479	1,190,530
	Storage	223,844	1,414,373
	Supplies	46,674	1,461,047
Technology	Accessories	167,380	1,628,427
	Copiers	149,528	1,777,955
	Machines	189,239	1,967,194
	Phones	330,007	2,297,201

11:36 PM 2/27/2023

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns Measure Names

Orders (Sample - Supers... Rows Category Sub-Category

Search

Tables

- Category
- City
- Country/Region
- Customer ID
- Customer Name
- Order Date
- Order ID
- Postal Code
- Product ID
- Product Name
- Region
- Row ID
- Segment
- Ship Date
- Ship Mode
- State
- Sub-Category
- Measure Names
- Discount
- Index
- Profit
- Quantity
- Sales
- Latitude (generated)

Data Source Sheet1 Sheet2

34 marks 17 rows by 2 columns SUM

Marks

Measure Values

Measure Values

Sum(Sales) Sum(Sales) △

Sheet 1

Category	Sub-Catego...	Sales	Running Sum of Sales along Pane (Down)
Furniture	Bookcases	114,880	114,880
	Chairs	328,449	443,329
	Furnishings	91,705	535,034
	Tables	206,966	742,000
Office Supplies	Appliances	107,532	107,532
	Art	27,119	134,651
	Binders	203,413	338,064
	Envelopes	16,476	354,540
	Fasteners	3,024	357,564
	Labels	12,486	370,051
	Paper	78,479	448,530
	Storage	223,844	672,373
	Supplies	46,674	719,047
Technology	Accessories	167,380	167,380
	Copiers	149,528	316,908
	Machines	189,239	506,147
	Phones	330,007	836,154

You can see the Cumulative SUM reset after each partition

## Understanding Table and Pane Option in Tableau:

- In the previous option, you have seen options like Table(down), pane(down), Pane(Across then down), Pane (down the across). We are now going to understand this in detail.

The screenshot shows the Tableau interface with a context menu open over a table. The menu path is 'Compute Using' > 'Pane (down then across)'. A callout bubble labeled 'Table Vs Pane' points to this menu item. The main view displays a table with columns 'Category', 'Sub-Catego...', 'Sales', and 'Running Sum of Sales along Pane (Down)'. The data includes categories like Furniture, Office Supplies, Technology, and their sub-categories with corresponding sales values.

Category	Sub-Catego...	Sales	Running Sum of Sales along Pane (Down)
Furniture	Bookcases	114,880	114,880
	Chairs	328,449	443,329
	Furnishings	91,705	535,034
	Tables	206,966	742,000
Office Supplies	Appliances	107,532	107,532
	Art	27,119	134,651
	Binders	203,413	338,064
	Envelopes	16,476	354,540
	Fasteners	3,024	357,564
	Labels	12,486	370,051
	Paper	78,479	448,530
	Storage		672,373
	Supplies		719,047
Technology	Accessories		167,380
	Copiers		316,908
	Machines		506,147
	Table (down)		836,154
	• Pane (down)		
	• Pane (across then down)		
	• Pane (down then across)		

- In the previous option, you have seen options like Table(down) and pane(down). We are now going to understand this in detail.
- Down** and **Across** are used to determine indexing. Indexing refers to assigning a relative position to a value compared to other values. Let's understand through a demonstration.
- Let's create a table by dragging **category, sub-category to rows and Region to column**

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns Region

Orders (Sample - Supers... Rows Category Sub-Category

Search

Tables

- Abc Category
- Abc City
- Abc Country/Region
- 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
- # Index
- # Profit
- # Quantity
- # Sales
- Latitude (generated)

Marks

Automatic

Color Size Text Detail Tooltip

Filters

Sheet 2

Category	Sub-Catego...	Region			
		Central	East	South	West
Furniture	Bookcases	Abc	Abc	Abc	Abc
	Chairs	Abc	Abc	Abc	Abc
	Furnishings	Abc	Abc	Abc	Abc
	Tables	Abc	Abc	Abc	Abc
Office Supplies	Appliances	Abc	Abc	Abc	Abc
	Art	Abc	Abc	Abc	Abc
	Binders	Abc	Abc	Abc	Abc
	Envelopes	Abc	Abc	Abc	Abc
	Fasteners	Abc	Abc	Abc	Abc
	Labels	Abc	Abc	Abc	Abc
	Paper	Abc	Abc	Abc	Abc
	Storage	Abc	Abc	Abc	Abc
	Supplies	Abc	Abc	Abc	Abc
Technology	Accessories	Abc	Abc	Abc	Abc
	Copiers	Abc	Abc	Abc	Abc
	Machines	Abc	Abc	Abc	Abc
	Phones	Abc	Abc	Abc	Abc

Data Source Sheet 1 Sheet 2 11:56 PM 2/27/2023

## Now we will create index using calculated field

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns Region

Orders (Sample - Supers... Rows Category Sub-Category

Create Calculated Field...

Create Parameter...

Group by Folder

- Group by Data Source Table
- Sort by Name
- Sort by Data Source Order

Hide All Unused Fields

Show Hidden Fields

Expand All

Collapse All

- 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)

Marks

Automatic

Color Size Text Detail Tooltip

Filters

Sheet 2

Category	Sub-Catego...	Region			
		Central	East	South	West
Furniture	Bookcases	Abc	Abc	Abc	Abc
	Chairs	Abc	Abc	Abc	Abc
	Furnishings	Abc	Abc	Abc	Abc
	Tables	Abc	Abc	Abc	Abc
Office Supplies	Appliances	Abc	Abc	Abc	Abc
	Art	Abc	Abc	Abc	Abc
	Binders	Abc	Abc	Abc	Abc
	Envelopes	Abc	Abc	Abc	Abc
	Fasteners	Abc	Abc	Abc	Abc
	Labels	Abc	Abc	Abc	Abc
	Paper	Abc	Abc	Abc	Abc
	Storage	Abc	Abc	Abc	Abc
	Supplies	Abc	Abc	Abc	Abc
Technology	Accessories	Abc	Abc	Abc	Abc
	Copiers	Abc	Abc	Abc	Abc
	Machines	Abc	Abc	Abc	Abc
	Phones	Abc	Abc	Abc	Abc

Data Source Sheet 1 Sheet 2 11:57 PM 2/27/2023

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns Region

Rows Category Sub-Category

Search

Tables

- Abc Category
- Abc City
- Abc Country/Region
- Abc Customer ID
- Abc Customer Name
- Abc Order Date
- Abc Order ID
- Abc Postal Code
- Abc Product ID
- Abc Product Name
- Abc Region
- # Row ID
- Abc Segment
- Ship Date
- Abc Ship Mode
- Abc State
- Abc Sub-Category
- Abc Measure Name
- # Discount
- # Profit
- # Quantity
- # Sales
- Latitude (generated)
- Longitude (generated)

Filters Marks Automatic

Sheet 2

Category	Sub-Catego..	Region			
		Central	East	South	West
Furniture	Bookcases	Abc	Abc	Abc	Abc
	Chairs	Abc	Abc	Abc	Abc
	Furnishings	Abc	Abc	Abc	Abc
	Tables	Abc	Abc	Abc	Abc

index

All ABS (number)

Search

ABS Returns the absolute value of the given number.

ACOS AND AREA ASCII ASIN ATAN ATAN2 ATTR AVG BUFFER CASE

Example: ABS(-7) = 7

Apply OK

Data Source Sheet 1 Sheet 2

68 marks 17 rows by 4 columns

11:57 PM 2/27/2023

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns Region

Rows Category Sub-Category

Search

Tables

- Abc Category
- Abc City
- Abc Country/Region
- Abc Customer ID
- Abc Customer Name
- Abc Order Date
- Abc Order ID
- Abc Postal Code
- Abc Product ID
- Abc Product Name
- Abc Region
- # Row ID
- Abc Segment
- Ship Date
- Abc Ship Mode
- Abc State
- Abc Sub-Category
- Abc Measure Name
- # Discount
- # Profit
- # Quantity
- # Sales
- Latitude (generated)
- Longitude (generated)

Filters Marks Automatic

Sheet 2

Category	Sub-Catego..	Region			
		Central	East	South	West
Furniture	Bookcases	Abc	Abc	Abc	Abc
	Chairs	Abc	Abc	Abc	Abc
	Furnishings	Abc	Abc	Abc	Abc
	Tables	Abc	Abc	Abc	Abc

index

All ABS (number)

Search

ABS Returns the absolute value of the given number.

ACOS AND AREA ASCII ASIN ATAN ATAN2 ATTR AVG BUFFER CASE

The calculation contains errors ▾

Apply OK

Data Source Sheet 1 Sheet 2

68 marks 17 rows by 4 columns

11:57 PM 2/27/2023

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns Region

Orders (Sample - Supers... Rows Category Sub-Category

Search

Tables

- Abc Category
- Abc City
- Abc Country/Region
- Abc Customer ID
- Abc Customer Name
- Abc Order Date
- Abc Order ID
- Abc Postal Code
- Abc Product ID
- Abc Product Name
- Abc Region
- # Row ID
- Abc Segment
- Ship Date
- Abc Ship Mode
- Abc State
- Abc Sub-Category
- Abc Measure Name
- # Discount
- # Profit
- # Quantity
- # Sales
- Abc Latitude (generated)
- Abc Longitude (generated)

index

INDEX()

The calculation is valid.

Default Table Calculation

Apply OK Apply and Close

INDEX()

Returns the index of the current row in the partition.

Example (for the first row in the partition): INDEX() = 1

All

Search

FIXED

FLOAT

FLOOR

FULLNAME

HEXBINX

HEXBINY

IF

IFNULL

IIF

IN

INCLUDE

INDEX

11:57 PM 2/27/2023

68 marks 17 rows by 4 columns

Sheet 1 Sheet 2

- Now we will drag index to the text

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns Region

Orders (Sample - Supers... Rows Category Sub-Category

Search

Tables

- Abc Category
- Abc City
- Abc Country/Region
- Abc Customer ID
- Abc Customer Name
- Abc Order Date
- Abc Order ID
- Abc Postal Code
- Abc Product ID
- Abc Product Name
- Abc Region
- # Row ID
- Abc Segment
- Abc Ship Date
- Abc Ship Mode
- Abc State
- Abc Sub-Category
- Abc Measure Names
- # Discount
- # index
- # Profit
- # Quantity
- # Sales
- Abc Latitude (generated)

Marks Automatic Color Size Text Detail Tooltip

Filters

Sheet 2

Category	Sub-Catego...	Region			
		Central	East	South	West
Furniture	Bookcases	Abc	Abc	Abc	Abc
	Chairs	Abc	Abc	Abc	Abc
	Furnishings	Abc	Abc	Abc	Abc
	Tables	Abc	Abc	Abc	Abc
Office Supplies	Appliances	Abc	Abc	Abc	Abc
	Art	Abc	Abc	Abc	Abc
	Binders	Abc	Abc	Abc	Abc
	Envelopes	Abc	Abc	Abc	Abc
	Fasteners	Abc	Abc	Abc	Abc
	Labels	Abc	Abc	Abc	Abc
	Paper	Abc	Abc	Abc	Abc
	Storage	Abc	Abc	Abc	Abc
	Supplies	Abc	Abc	Abc	Abc
Technology	Accessories	Abc	Abc	Abc	Abc
	Copiers	Abc	Abc	Abc	Abc
	Machines	Abc	Abc	Abc	Abc
	Phones	Abc	Abc	Abc	Abc

68 marks 17 rows by 4 columns

11:58 PM 2/27/2023

- We can see index are assigned to each value

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns Region

Orders (Sample - Supers... Rows Category Sub-Category

Search

Tables

- Abc Category
- Abc City
- Abc Country/Region
- Abc Customer ID
- Abc Customer Name
- Abc Order Date
- Abc Order ID
- Abc Postal Code
- Abc Product ID
- Abc Product Name
- Abc Region
- # Row ID
- Abc Segment
- Abc Ship Date
- Abc Ship Mode
- Abc State
- Abc Sub-Category
- Abc Measure Names
- # Discount
- # index
- # Profit
- # Quantity
- # Sales
- Abc Latitude (generated)

Marks Automatic Color Size Text Detail Tooltip Index ▲

Filters

Sheet 2

Category	Sub-Catego...	Region			
		Central	East	South	West
Furniture	Bookcases	1	2	3	4
	Chairs	1	2	3	4
	Furnishings	1	2	3	4
	Tables	1	2	3	4
Office Supplies	Appliances	1	2	3	4
	Art	1	2	3	4
	Binders	1	2	3	4
	Envelopes	1	2	3	4
	Fasteners	1	2	3	4
	Labels	1	2	3	4
	Paper	1	2	3	4
	Storage	1	2	3	4
	Supplies	1	2	3	4
Technology	Accessories	1	2	3	4
	Copiers	1	2	3	4
	Machines	1	2	3	4
	Phones	1	2	3	4

68 marks 17 rows by 4 columns SUM OF AGG(index): 170

11:59 PM 2/27/2023

- Now we will go to “compute using” option and then we can play around with various options

The screenshot shows the Tableau Public interface with a data shelf named 'Sheet 2'. The shelf contains a single table with columns: Category, Sub-Catego.., Central, East, South, and West. The 'Sub-Catego..' column is currently set to 'Region'. A context menu is open over the 'Sub-Catego..' column, with the 'Compute Using' option highlighted.

Category	Sub-Catego..	Central	East	South	West
Furniture	Bookcases	1	2	3	4
	Chairs	1	2	3	4
	Furnishings	1	2	3	4
	Tables	1	2	3	4
Office Supplies	Appliances	1	2	3	4
	Art	1	2	3	4
	Binders	1	2	3	4
	Envelopes	1	2	3	4
	Fasteners	1	2	3	4
	Labels	1	2	3	4
	Paper	1	2	3	4
	Storage	1	2	3	4
	Supplies	1	2	3	4
Category	Accessories	1	2	3	4
	Copiers	1	2	3	4
	Machines	1	2	3	4
	Phrases	1	2	3	4

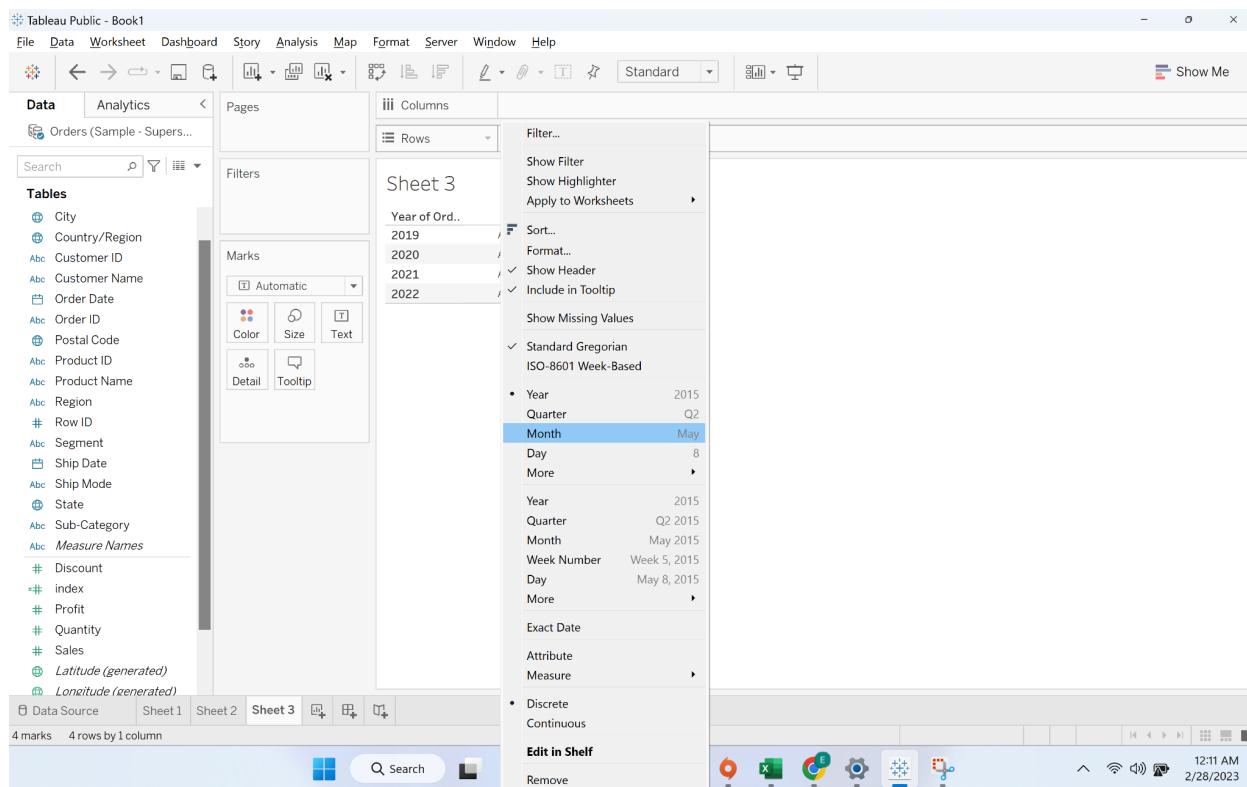
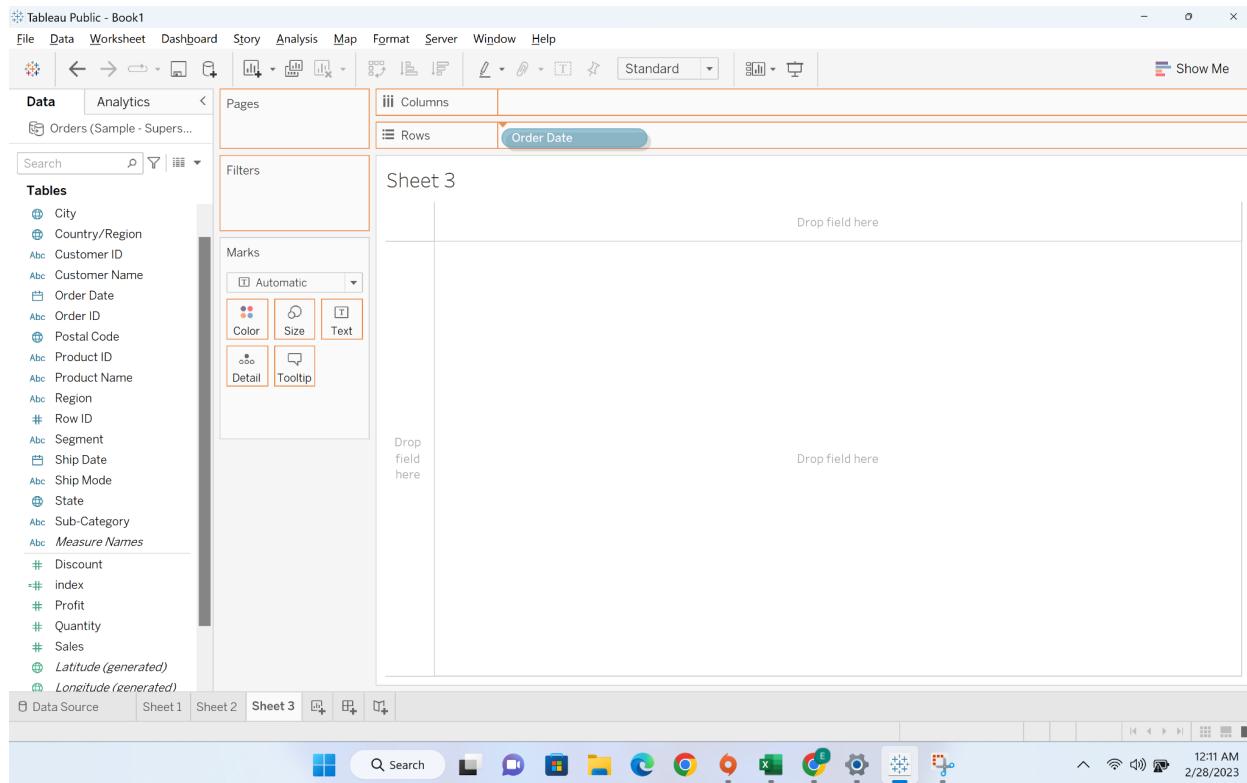
The context menu for 'Compute Using' includes the following options:

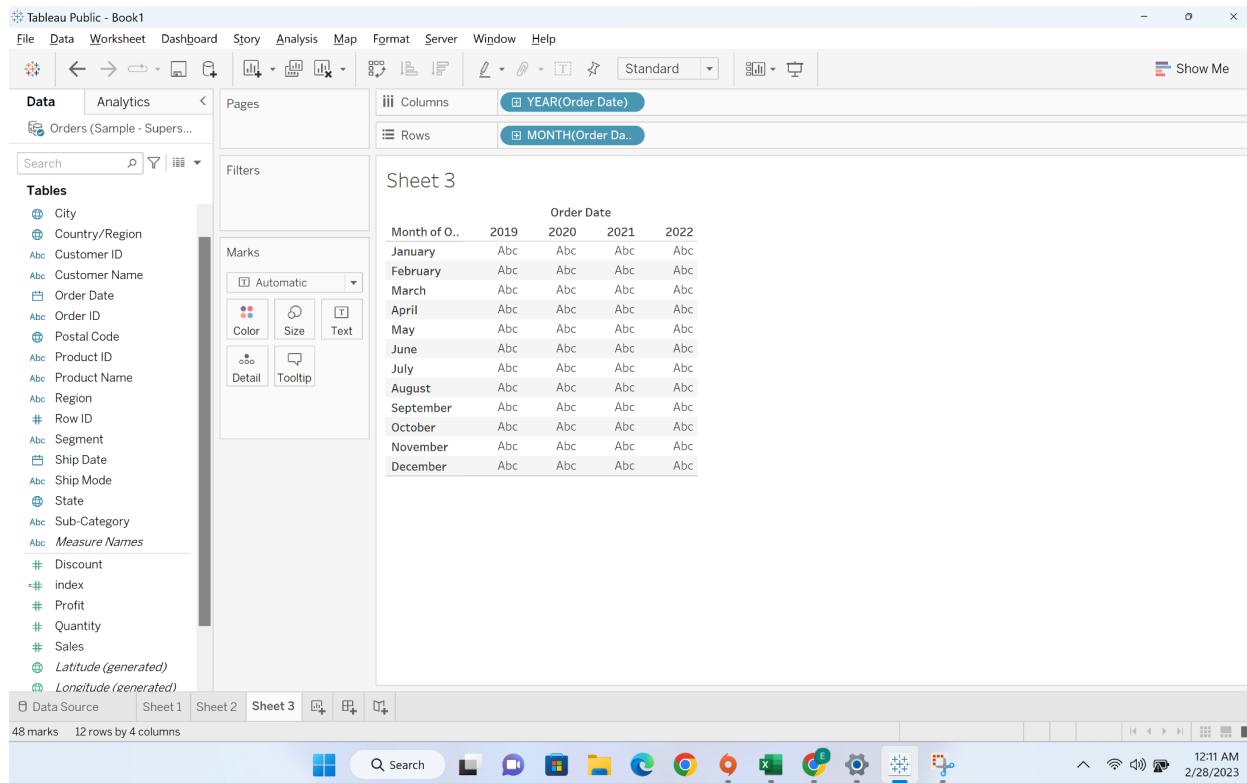
- Table (across)
- Table (down)
- Table (across then down)
- Table (down then across)
- Pane (down)
- Pane (across then down)
- Pane (down then across)
- Cell
- Category
- Region
- Sub-Category

**Business problem 1** -find percentage of total sales made per month for each year

**Solution-1:**

- Create a tabular view by dragging order date (and convert it into month) to rows and order date (and convert it to year) to columns





### ● Drag the sales to text

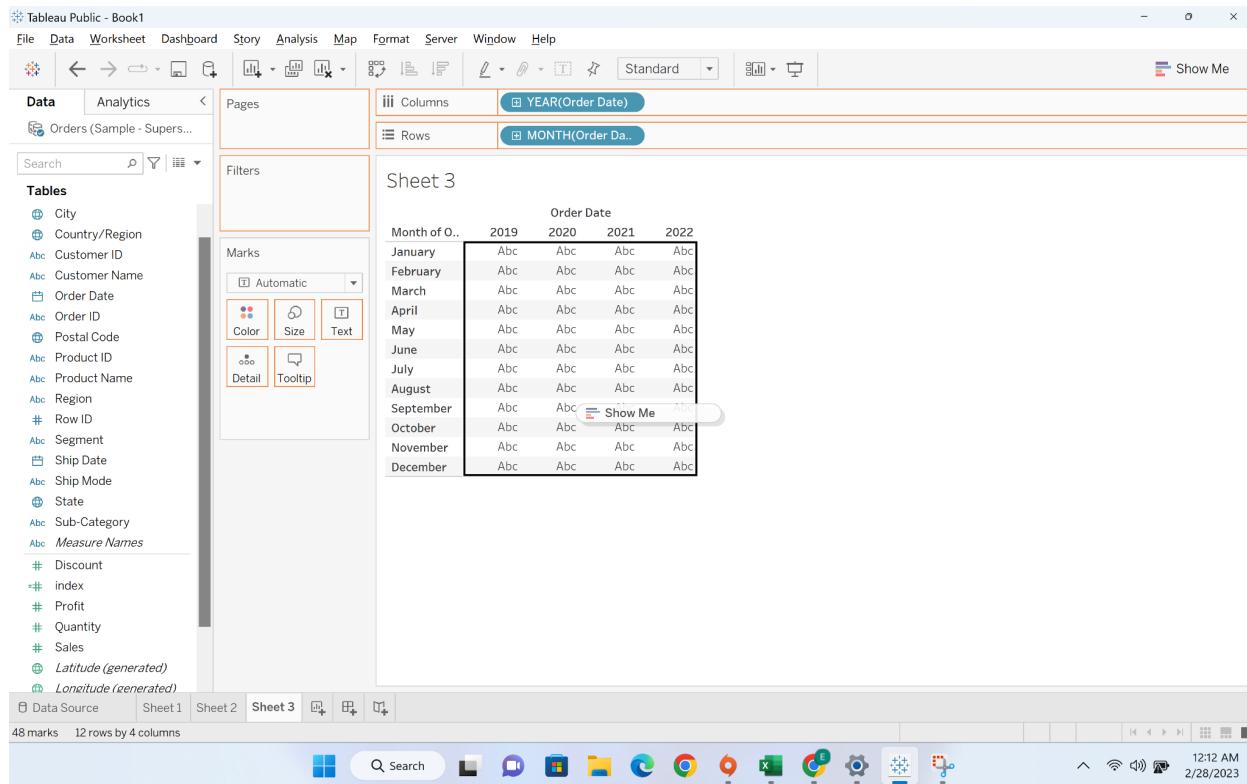


Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns YEAR(Order Date) Rows MONTH(Order Da..

Search Orders (Sample - Supers... Tables

City Country/Region Customer ID Customer Name Order Date Order ID Postal Code Product ID Product Name Region Row ID Segment Ship Date Ship Mode Ship Mode State Sub-Category Measure Names

Discount index Profit Quantity Sales Latitude (generated) Longitude (generated)

Order Date

Month of O.. 2019 2020 2021 2022

Month of O..	2019	2020	2021	2022
January	14,237	18,174	18,542	43,971
February	4,520	11,951	22,979	20,301
March	55,691	38,726	51,716	58,872
April	28,295	34,195	38,750	36,522
May	23,648	30,132	56,988	44,261
June	34,595	24,797	40,345	52,982
July	33,946	28,765	39,262	45,264
August	27,909	36,898	31,115	63,121
September	81,777	64,596	73,410	87,867
October	31,453	31,405	59,688	77,777
November	78,629	75,973	79,412	118,448
December	69,546	74,920	96,999	83,829

Sheet 3

Order Date

Month of O.. 2019 2020 2021 2022

Month of O..	2019	2020	2021	2022
January	14,237	18,174	18,542	43,971
February	4,520	11,951	22,979	20,301
March	55,691	38,726	51,716	58,872
April	28,295	34,195	38,750	36,522
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September	81,777	64,596	73,410	87,867
October	31,453	31,405	59,688	77,777
November	78,629	75,973	79,412	118,448
December	69,546	74,920	96,999	83,829

48 marks 12 rows by 4 columns SUM(Sales): 2,297,201

12:12 AM 2/28/2023

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File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns YEAR(Order Date) Rows MONTH(Order Da..

Search Orders (Sample - Supers... Tables

City Country/Region Customer ID Customer Name Order Date Order ID Postal Code Product ID Product Name Region Row ID Segment Ship Date Ship Mode Ship Mode State Sub-Category Measure Names

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October	31,453	31,405	59,688	77,777
November	78,629	75,973	79,412	118,448
December	69,546	74,920	96,999	83,829

Sheet 3

Order Date

Month of O.. 2019 2020 2021 2022

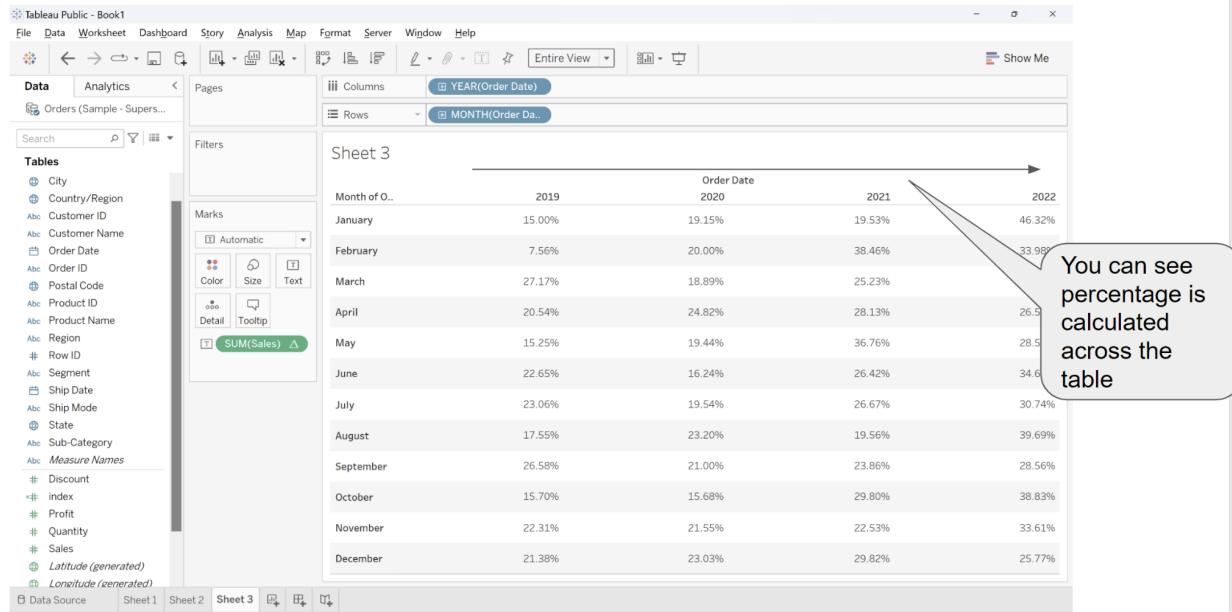
Month of O..	2019	2020	2021	2022
January	14,237	18,174	18,542	43,971
February	4,520	11,951	22,979	20,301
March	55,691	38,726	51,716	58,872
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November	78,629	75,973	79,412	118,448
December	69,546	74,920	96,999	83,829

48 marks 12 rows by 4 columns SUM(Sales): 2,297,201

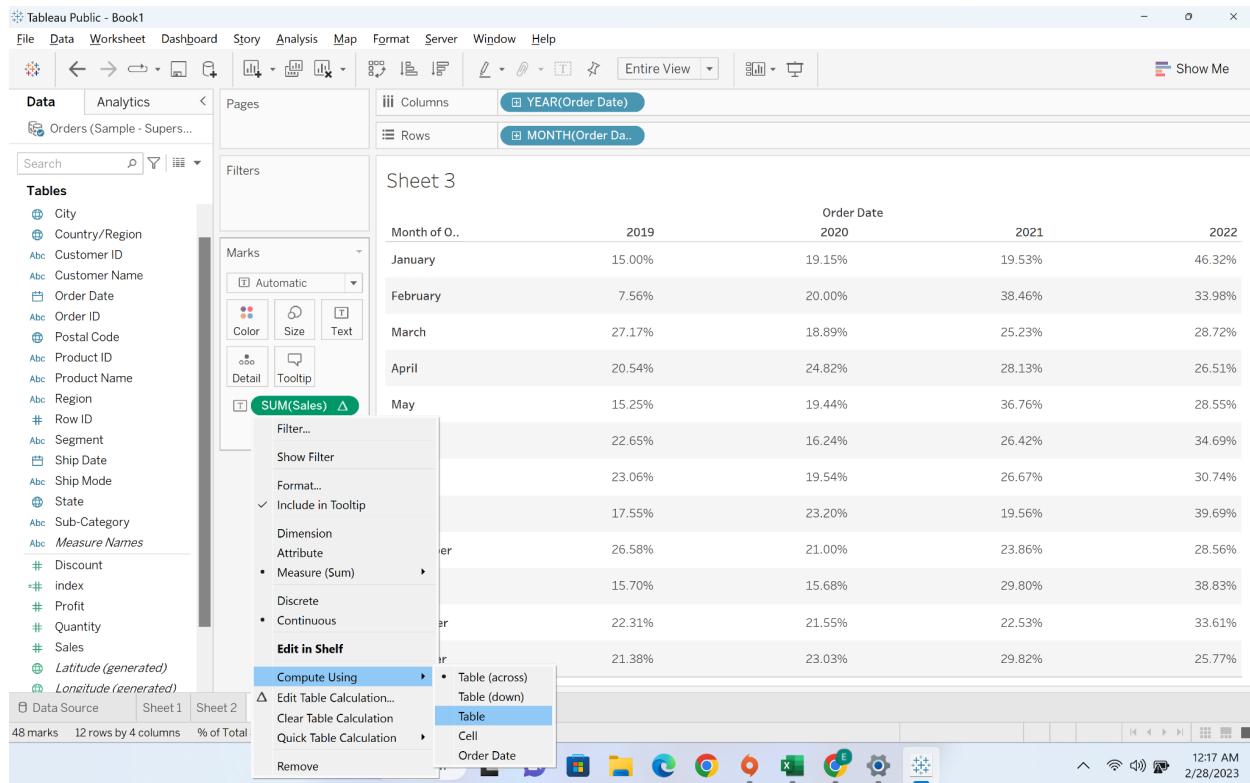
12:12 AM 2/28/2023

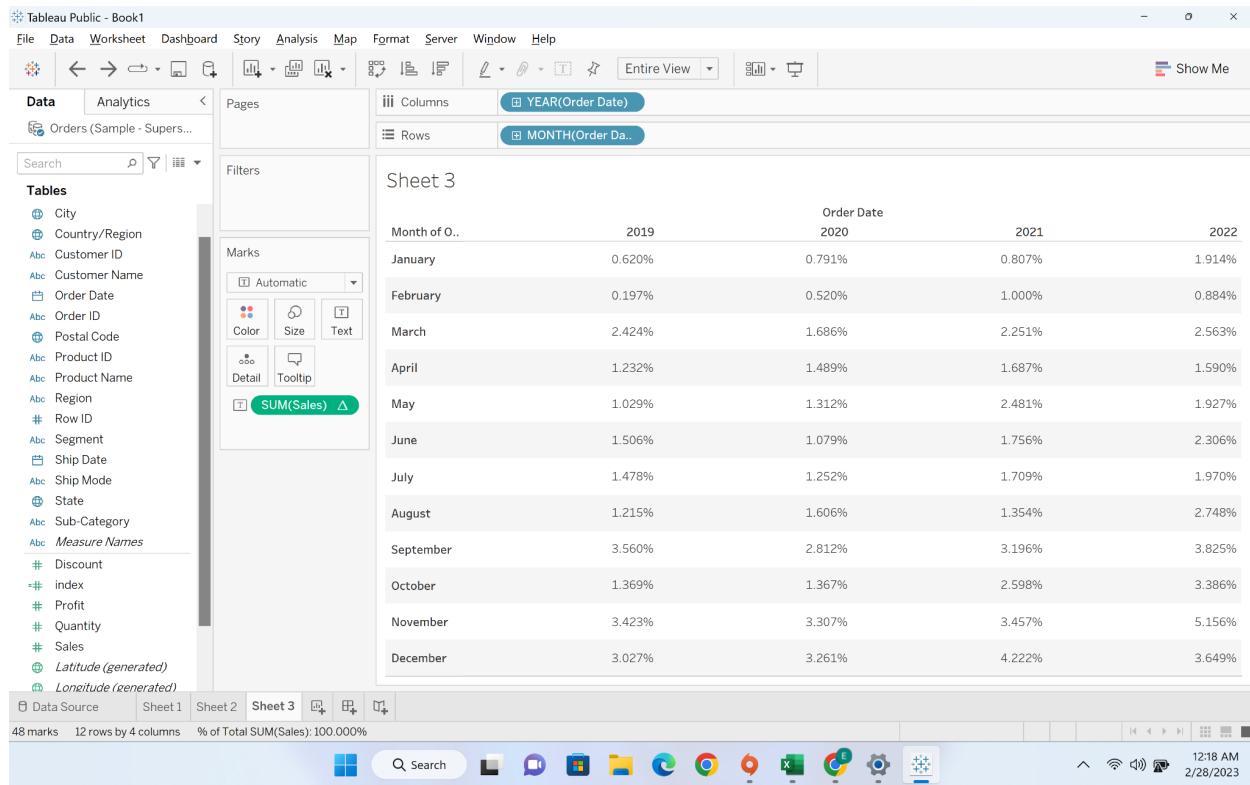
Quick Table Calculation >

- Running Total
- Difference
- Percent Difference
- Percent of Total**
- Rank
- Percentile
- Moving Average
- YTD Total
- Compound Growth Rate
- Year Over Year Growth
- YTD Growth



- We will change it from across the table to the entire table





**Business problem 2**-find percentage of total sales done across different categories for each quarter of the given year

#### Solution-1:

- Create a tabular view with year and quarter in rows and category in column

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File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages

Summarize

- Constant Line
- Average Line
- Median with Quartiles
- Box Plot
- Totals

Model

- Average with 95% CI
- Median with 95% CI
- Trend Line
- Forecast
- Cluster

Custom

- Reference Line
- Reference Band
- Distribution Band
- Box Plot

Category

YEAR(Order Date)

QUARTER(Order Date)

Sheet 4

Year of Order Date	Quarter of Order Date	Furniture	Office Supplies	Technology
2019	Q1	22,656	14,529	37,263
	Q2	28,064	31,244	27,231
	Q3	41,958	53,924	47,751
	Q4	64,515	52,080	63,033
2020	Q1	27,374	23,059	18,418
	Q2	27,565	32,320	29,239
	Q3	49,586	35,761	44,913
	Q4	65,993	46,093	70,211
2021	Q1	24,349	29,441	39,447
	Q2	41,402	34,584	60,095
	Q3	52,815	45,148	45,825
	Q4	80,335	74,767	80,997
2022	Q1	23,724	43,232	56,189
	Q2	45,032	45,721	43,011
	Q3	56,283	72,197	67,772
	Q4	90,348	84,946	104,759

Data Source Sheet 1 Sheet 2 Sheet 3 Sheet 4 SUM(Sales): 2,297,201

48 marks 16 rows by 3 columns 12:28 AM 2/28/2023

- We will now convert it into percentage

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Show Me

Data Analytics < Pages

Summarize

- Constant Line
- Average Line
- Median with Quartiles
- Box Plot
- Totals

Model

- Average with 95% CI
- Median with 95% CI
- Trend Line
- Forecast
- Cluster

Custom

- Reference Line
- Reference Band
- Distribution Band
- Box Plot

Category

YEAR(Order Date)

QUARTER(Order Date)

Sheet 4

Year of Order Date	Quarter of Order Date	Furniture	Office Supplies	Technology
2019	Q1	22,656	14,529	37,263
	Q2	28,064	31,244	27,231
	Q3	41,958	53,924	47,751
	Q4	64,515	52,080	63,033
2020	Q1	27,374	23,059	18,418
	Q2	27,565	32,320	29,239
	Q3	49,586	35,761	44,913
	Q4	65,993	46,093	70,211
2021	Q1	24,349	29,441	39,447
	Q2	41,402	34,584	60,095
	Q3	52,815	45,148	45,825
	Q4	80,335	74,767	80,997
2022	Q1	23,724	43,232	56,189
	Q2	45,032	45,721	43,011
	Q3	56,283	72,197	67,772
	Q4	90,348	84,946	104,759

Data Source Sheet 1 Sheet 2 Sheet 3 Sheet 4 SUM(Sales): 2,297,201

48 marks 16 rows by 3 columns 12:28 AM 2/28/2023

- We will now show the sub total and row wise percentage by using analysis tool at the top

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Show Mark Labels  
✓ Aggregate Measures  
Stack Marks  
View Data...  
Explain Data  
Reveal Hidden Data

Pages

Constant Line  
Average Line  
Median with Quartiles  
Box Plot  
Totals

Summarize

Filters

Percentage Of  
Totals  
Forecast  
Trend Lines  
Special Values  
Table Layout  
Legends  
Filters  
Highlighters  
Parameters

Marks

Au  
Color  
Detail

Custom

Reference Line  
Reference Band  
Distribution Band  
Box Plot

Show Me

Entire View

Furniture Office Supplies Technology

Category

	Furniture	Office Supplies	Technology
30.43%	19.52%	50.05%	
32.43%	36.10%	31.47%	
29.21%	37.54%	33.25%	
35.92%	28.99%	35.09%	
39.76%	33.49%	26.75%	
30.93%	36.26%	32.81%	
38.07%	27.45%	34.48%	
36.20%	25.28%	38.51%	
26.12%	31.58%	42.31%	
30.42%	25.41%	44.16%	
Q3	36.73%	31.40%	
Q4	34.03%	31.67%	
2022 Q1	19.26%	35.11%	
Q2	33.67%	34.18%	
Q3	28.68%	36.79%	
Q4	32.26%	30.33%	

Swap Rows and Columns Ctrl+W

Data Source Sheet 1 Sheet 2 Sheet 3 Sheet 4

48 marks 16 rows by 3 columns % of Total SUM(Sales): 1,600.00%

12:30 AM 2/28/2023

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File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Mark Labels  
✓ Aggregate Measures  
Stack Marks  
View Data...  
Explain Data  
Reveal Hidden Data  
Percentage Of  
Totals  
Forecast  
Trend Lines  
Special Values  
Table Layout  
Legends  
Filters  
Highlighters  
Parameters  
Create Calculated Field...  
Edit Calculated Field  
Infer Properties from Missing Values  
Cycle Fields  
Swap Rows and Columns Ctrl+W

Data Analytics Summarize Constant Line Average Line Median with Quartiles Box Plot Totals Model Average with 95% CI Median with 95% CI Trend Line Forecast Cluster Custom Reference Line Reference Band Distribution Band Box Plot

Entire View Pages Categories

		Category	
	Picture	Office Supplies	Technology
Row Totals to Left	.43%	19.52%	50.05%
Column Totals to Top	.43%	36.10%	31.47%
Add All Subtotals	.21%	37.54%	33.25%
Remove All Subtotals	.92%	28.99%	35.09%
Total All Using	39.76%	33.49%	26.75%
	30.93%	36.26%	32.81%
	38.07%	27.45%	34.48%
	36.20%	25.28%	38.51%
	26.12%	31.58%	42.31%
	30.42%	25.41%	44.16%
Q3	36.73%	31.40%	31.87%
Q4	34.03%	31.67%	34.31%
2022 Q1	19.26%	35.11%	45.63%
Q2	33.67%	34.18%	32.15%
Q3	28.68%	36.79%	34.53%
Q4	32.26%	30.33%	37.41%

Data Source Sheet 1 Sheet 2 Sheet 3 Sheet 4 Search 48 marks 16 rows by 3 columns % of Total SUM(Sales): 1,600.00% 12:30 AM 2/28/2023

Tableau Public - Book1

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Show Me

Data Analytics < Pages Columns Category

Summarize

- Constant Line
- Average Line
- Median with Quartiles
- Box Plot
- Totals

Model

- Average with 95% CI
- Median with 95% CI
- Trend Line
- Forecast
- Cluster

Custom

- Reference Line
- Reference Band
- Distribution Band
- Box Plot

Filters

Marks

Automatic

Color Size Text

Detail Tooltip

**SUM(Sales)**

Sheet 4

Year of Order Date	Quarter of Order Date	Furniture	Office Supplies	Technology	Grand Total
2019	Q1	30.43%	19.52%	50.05%	100.00%
	Q2	32.43%	36.10%	31.47%	100.00%
	Q3	29.21%	37.54%	33.25%	100.00%
	Q4	35.92%	28.99%	35.09%	100.00%
2020	Q1	39.76%	33.49%	26.75%	100.00%
	Q2	30.93%	36.26%	32.81%	100.00%
	Q3	38.07%	27.45%	34.48%	100.00%
	Q4	36.20%	25.28%	38.51%	100.00%
2021	Q1	26.12%	31.58%	42.31%	100.00%
	Q2	30.42%	25.41%	44.16%	100.00%
	Q3	36.73%	31.40%	31.87%	100.00%
	Q4	34.03%	31.67%	34.31%	100.00%
2022	Q1	19.26%	35.11%	45.63%	100.00%
	Q2	33.67%	34.18%	32.15%	100.00%
	Q3	28.68%	36.79%	34.53%	100.00%
	Q4	32.26%	30.33%	37.41%	100.00%

Data Source Sheet 1 Sheet 2 Sheet 3 Sheet 4

64 marks 16 rows by 4 columns % of Total SUM(Sales): 1,600.00%

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Show Me

Data Analytics < Pages Columns Category

Summarize

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- Reference Line
- Reference Band
- Distribution Band
- Box Plot

Filters

Marks

Aggregate Measures

Stack Marks

View Data...

Explain Data

Reveal Hidden Data

Percentage Of

**Totals**

- Show Row Grand Totals
- Show Column Grand Totals
- Row Totals to Left
- Column Totals to Top
- Add All Subtotals
- Remove All Subtotals
- Total All Using

Office Supplies Technology Grand Total

19.52% 50.05% 100.00%

36.10% 31.47% 100.00%

37.54% 33.25% 100.00%

28.99% 35.09% 100.00%

39.76% 33.49% 26.75% 100.00%

30.93% 36.26% 32.81% 100.00%

38.07% 27.45% 34.48% 100.00%

36.20% 25.28% 38.51% 100.00%

26.12% 31.58% 42.31% 100.00%

30.42% 25.41% 44.16% 100.00%

36.73% 31.40% 31.87% 100.00%

34.03% 31.67% 34.31% 100.00%

19.26% 35.11% 45.63% 100.00%

33.67% 34.18% 32.15% 100.00%

28.68% 36.79% 34.53% 100.00%

32.26% 30.33% 37.41% 100.00%

Q3 Q4

2022 Q1 Q2 Q3 Q4

Data Source Sheet 1 Sheet 2 Sheet 3 Sheet 4

64 marks 16 rows by 4 columns % of Total SUM(Sales): 1,600.00%

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File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

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Data Analytics < Pages Columns Category

Summarize

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Custom

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Filters

Sheet 4

Year of Order Date	Quarter of Order Date	Category			Grand Total
		Furniture	Office Supplies	Technology	
2019	Q1	30.43%	19.52%	50.05%	100.00%
	Q2	32.43%	36.10%	31.47%	100.00%
	Q3	29.21%	37.54%	33.25%	100.00%
	Q4	35.92%	28.99%	35.09%	100.00%
	Total	32.46%	31.34%	36.20%	100.00%
2020	Q1	39.76%	33.49%	26.75%	100.00%
	Q2	30.93%	36.26%	32.81%	100.00%
	Q3	38.07%	27.45%	34.48%	100.00%
	Q4	36.20%	25.28%	38.51%	100.00%
	Total	36.24%	29.17%	34.60%	100.00%
2021	Q1	26.12%	31.58%	42.31%	100.00%
	Q2	30.42%	25.41%	44.16%	100.00%
	Q3	36.73%	31.40%	31.87%	100.00%
	Q4	34.03%	31.67%	34.31%	100.00%
	Total	32.65%	30.19%	37.16%	100.00%
2022	Q1	19.26%	35.11%	45.63%	100.00%
	Q2	33.67%	34.18%	32.15%	100.00%
	Q3	28.68%	36.79%	34.53%	100.00%
	Q4	32.26%	30.33%	37.41%	100.00%
	Total	29.38%	33.56%	37.06%	100.00%

Data Source Sheet 1 Sheet 2 Sheet 3 Sheet 4 80 marks 20 rows by 4 columns % of Total SUM(Sales): 1,600.00%

Search

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