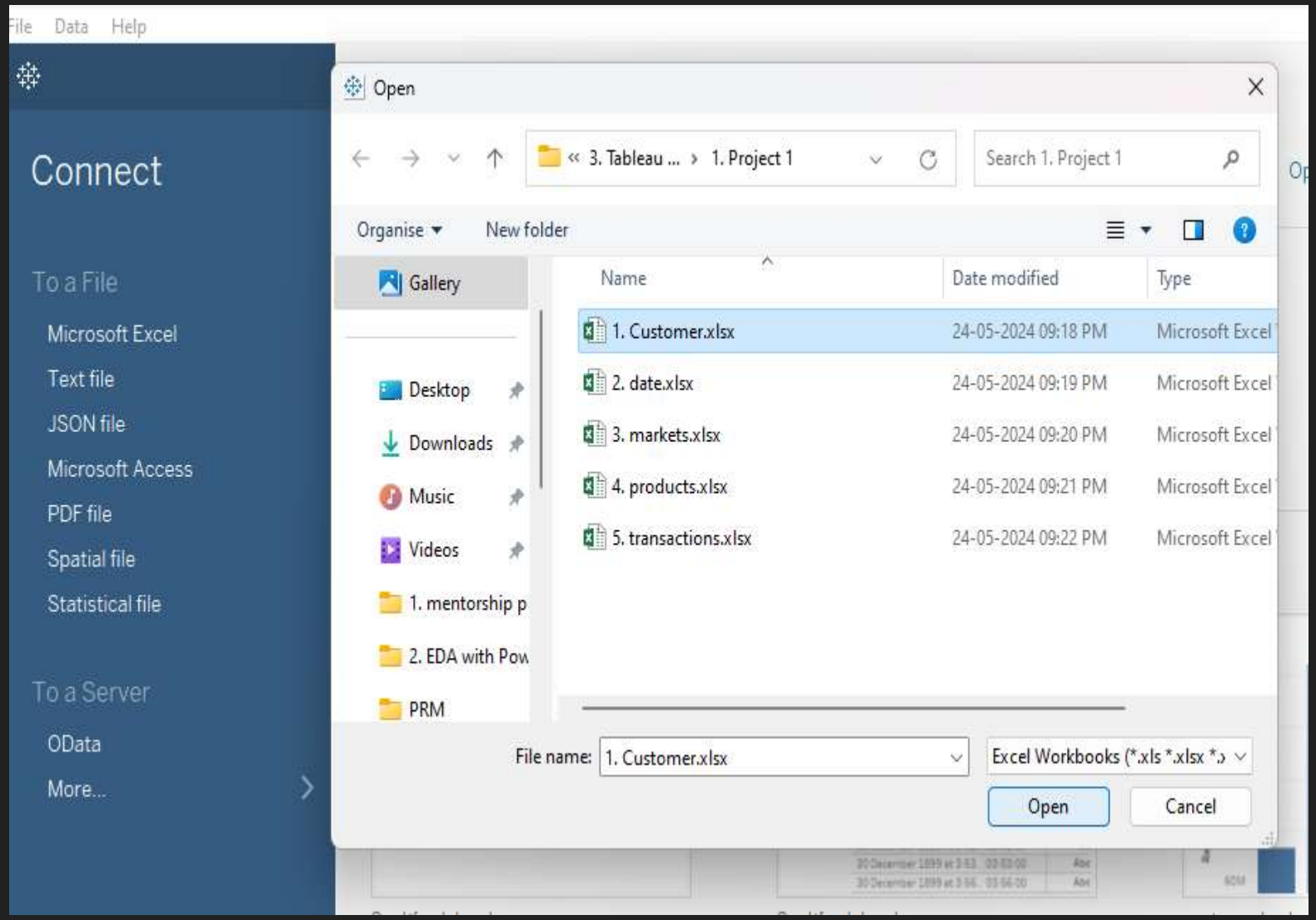
Sales Insights

Connect the Excel's in Tableau

I have exported the csv files , now I have 5 csv files and I want to connect these files in tableau.

Below mentioned are the steps to connect the csv files (I have converted csv file to excel file) .

Step1 : Open your tableau public



Step 2: click on Microsoft excel and select the excel1 (customer.xlsx)

Step3 : click open

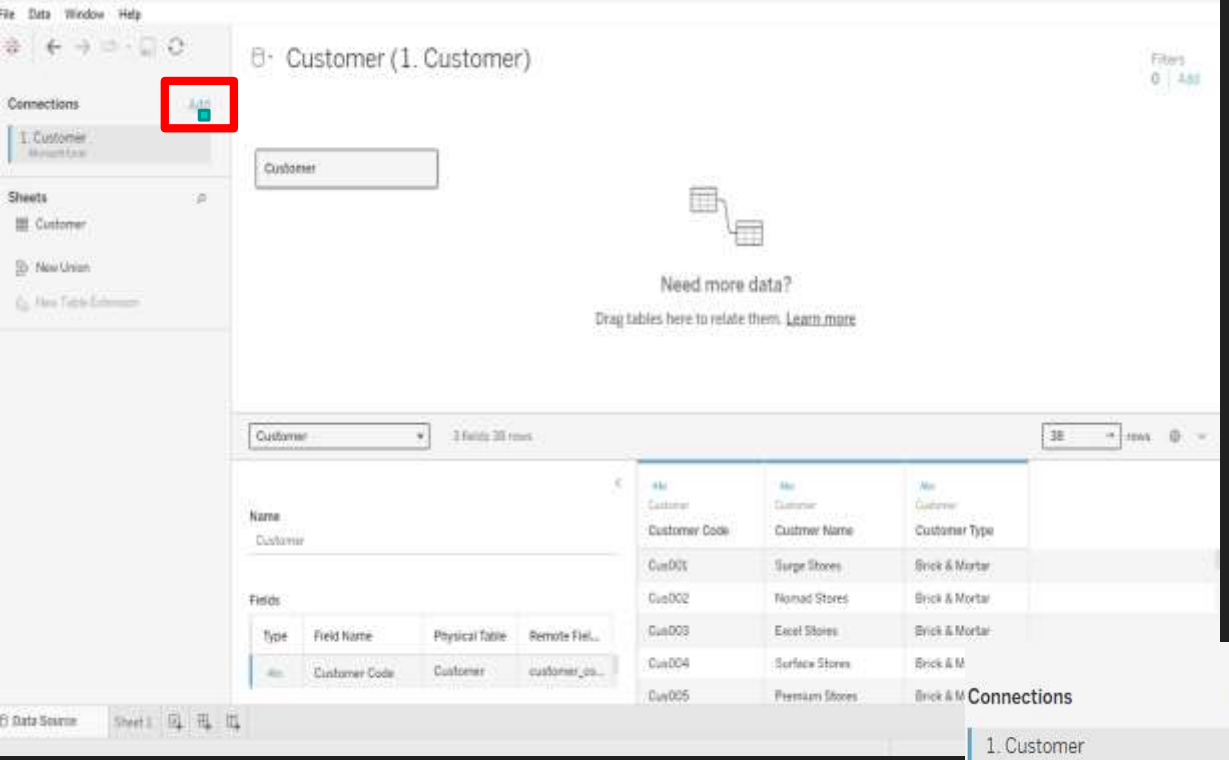
Note : in tableau desktop you can directly connect with database server, here I don't have tableau Desktop .

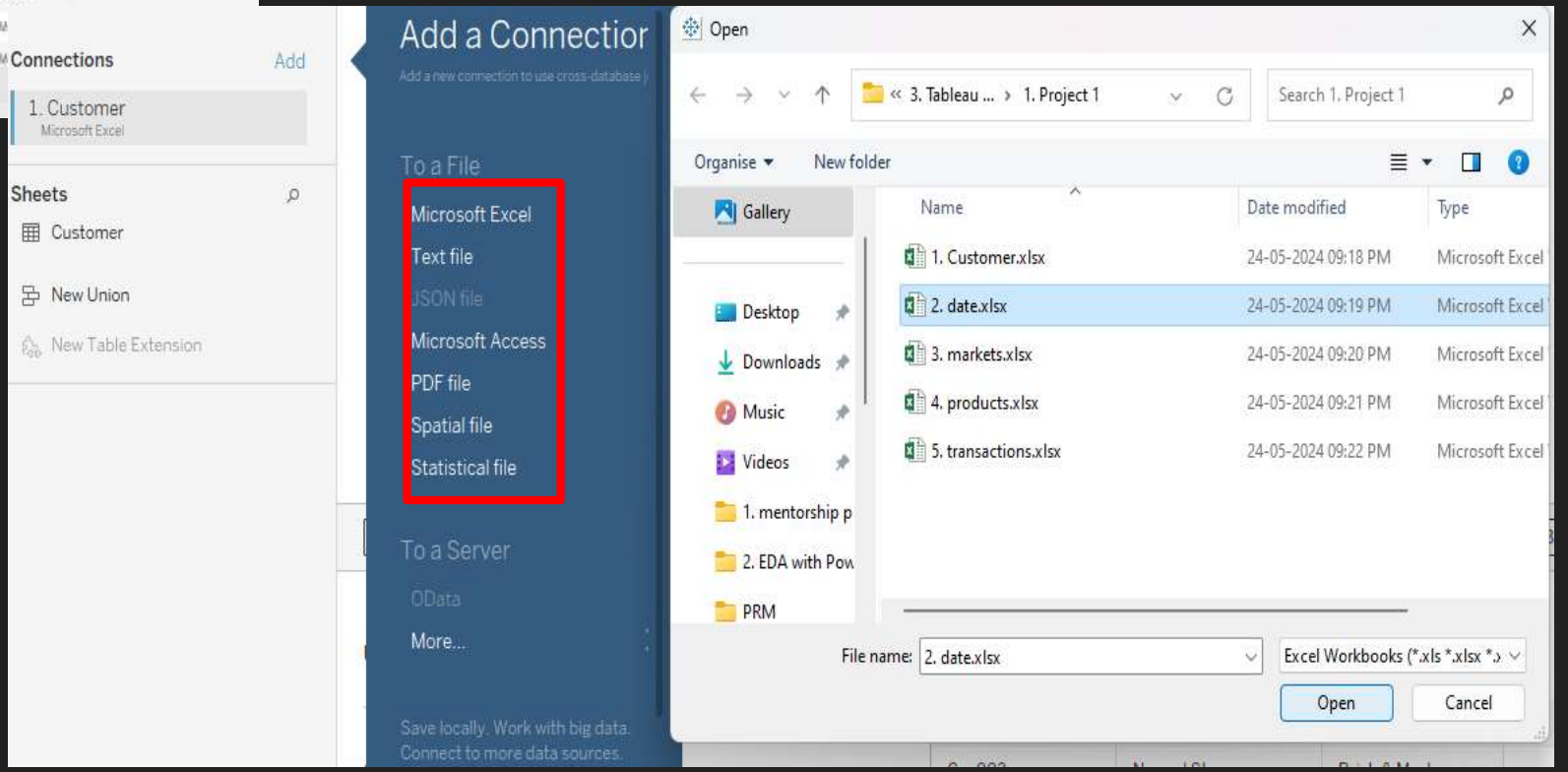
Step4 : to connect more excels, you can click on Add as shown in the picture.

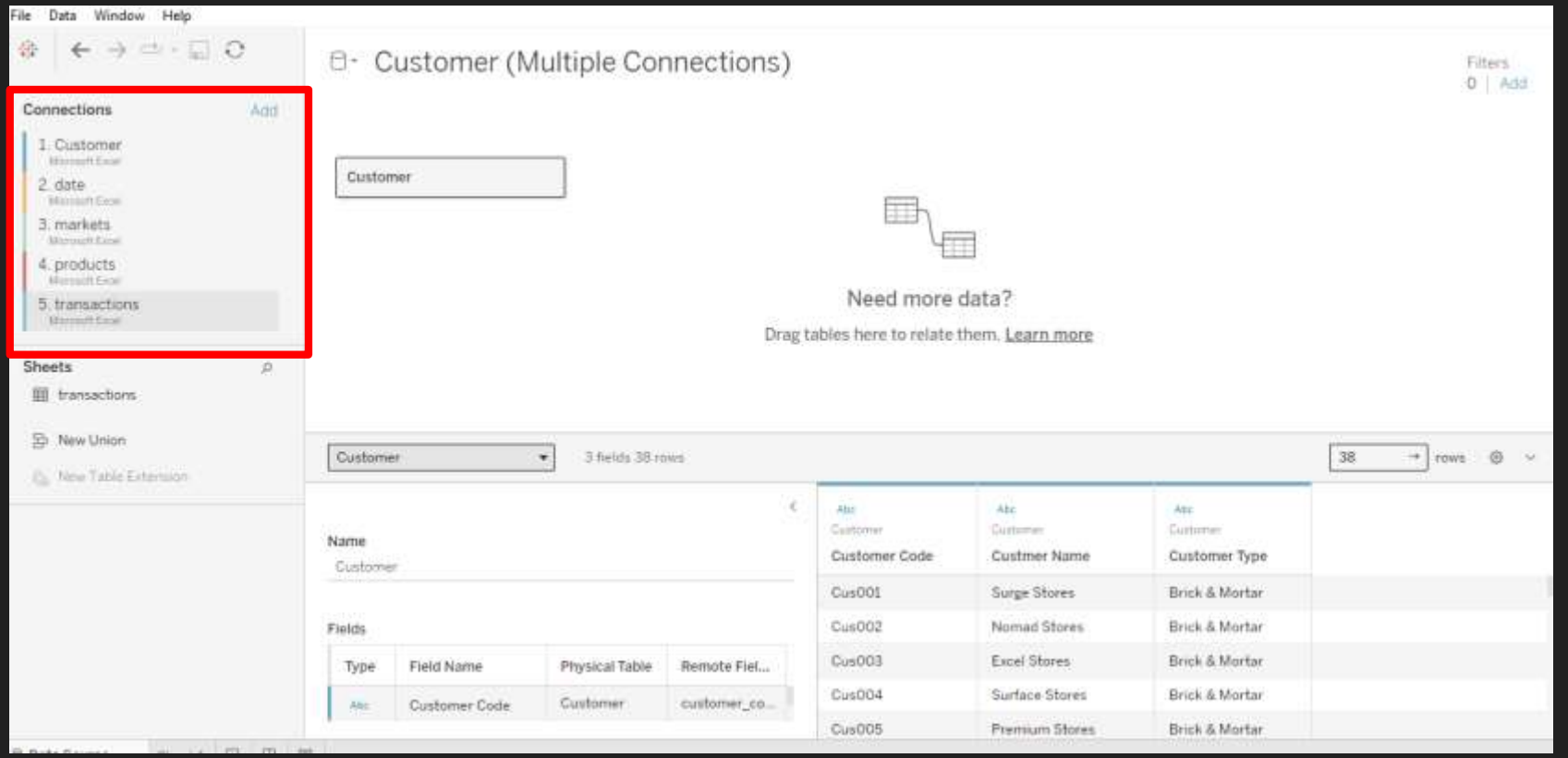
Step5: select Microsoft excel

Step6 : select and open the required file.

Step7: continue for all the excel files.







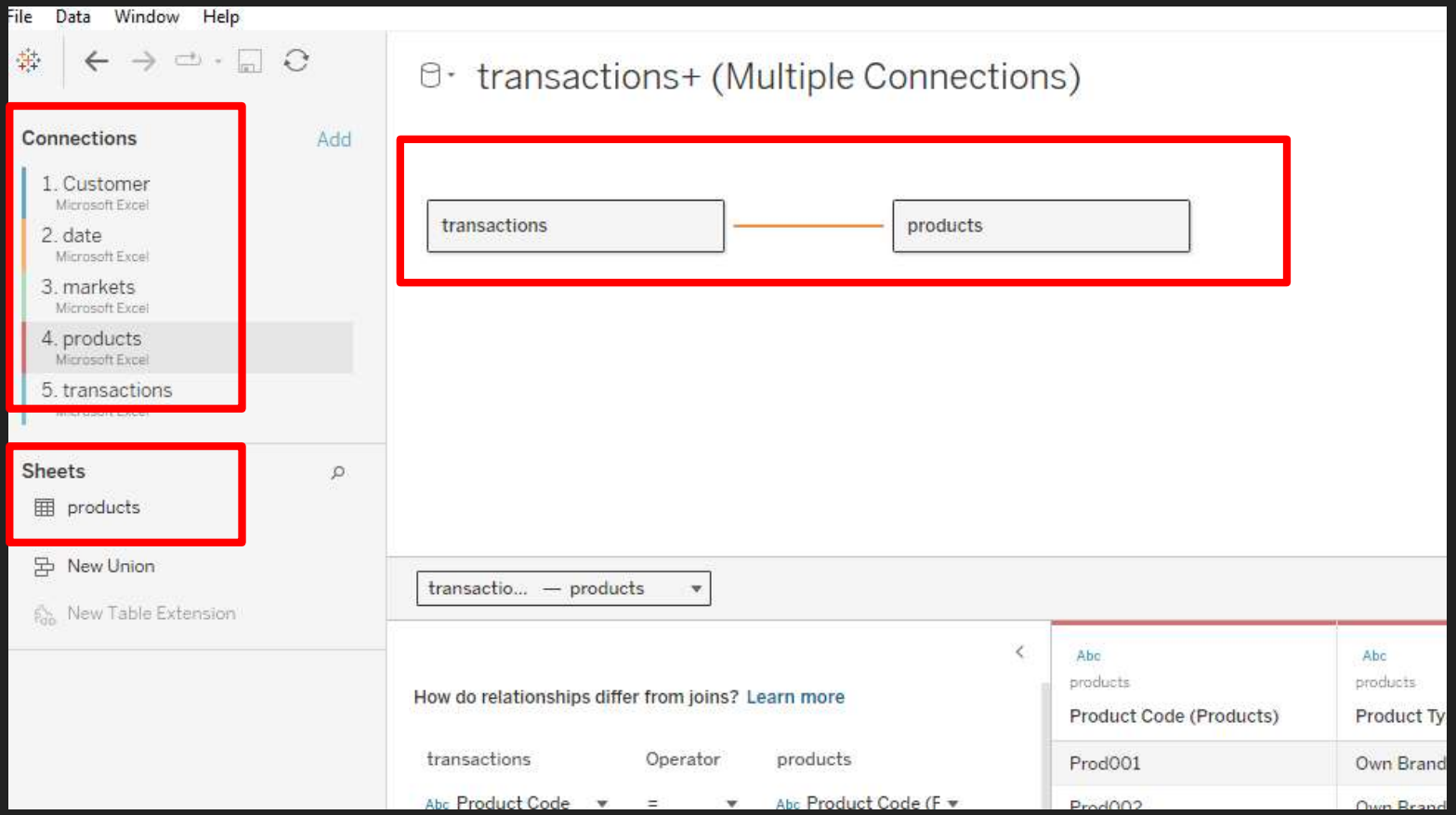
After connecting, right side of your tableau you will see connections section

In that you can see all the excels you connected.

Build the cardinality / star schema

To build cardinality (building a relation ship between excel files). Identify the common fields in all the files where we can build relation ship.

In this we are building one – many relation ship

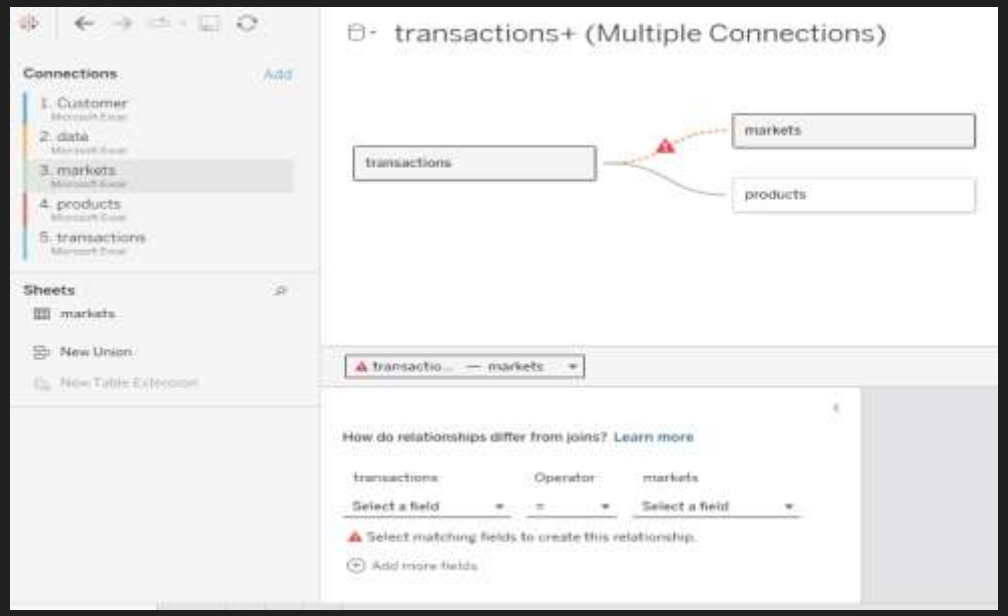


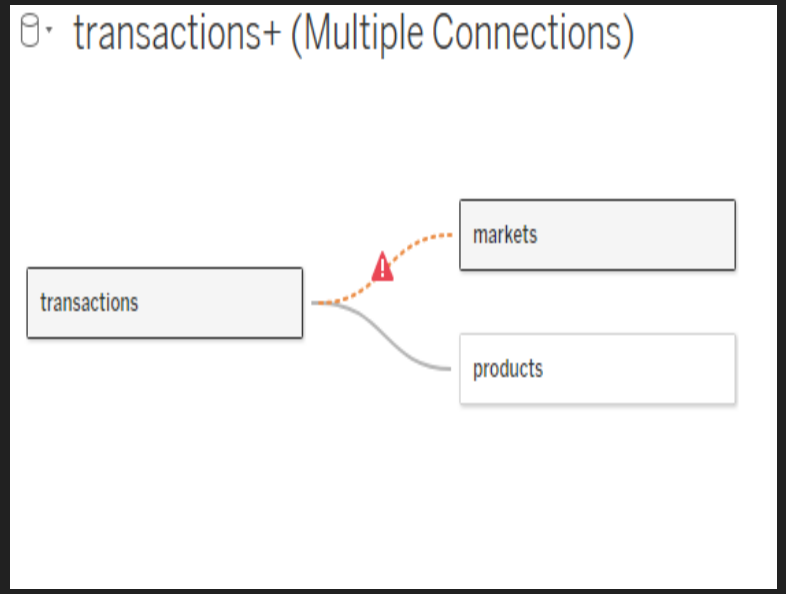
Click on the excel file in connections

In sheets section you can find the name of the excel .

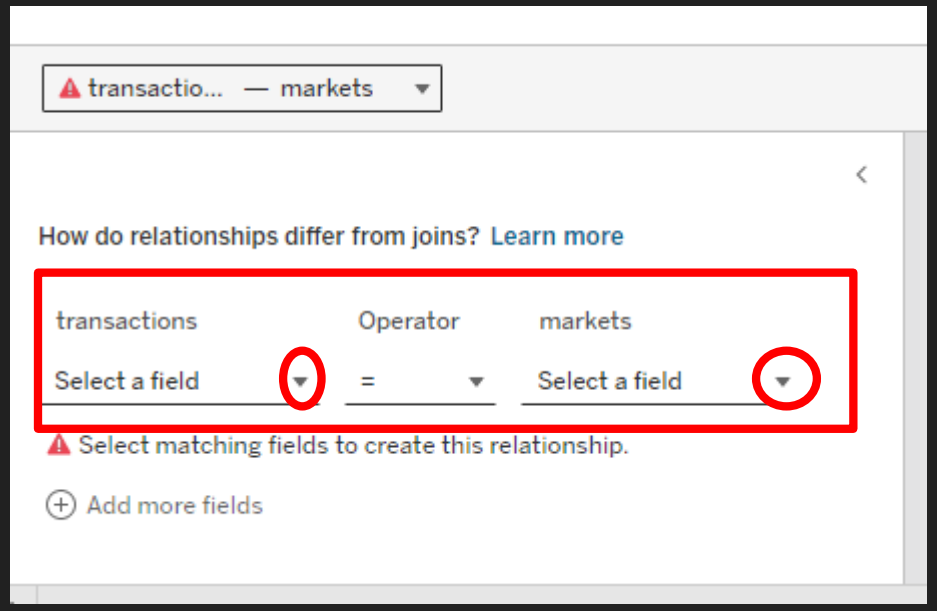
Drag and drop the excel sheet as shown .

If there is a common field then the tableau automatically builds a relationship. If not it shows error you can rectify the error by selecting the common columns manually.



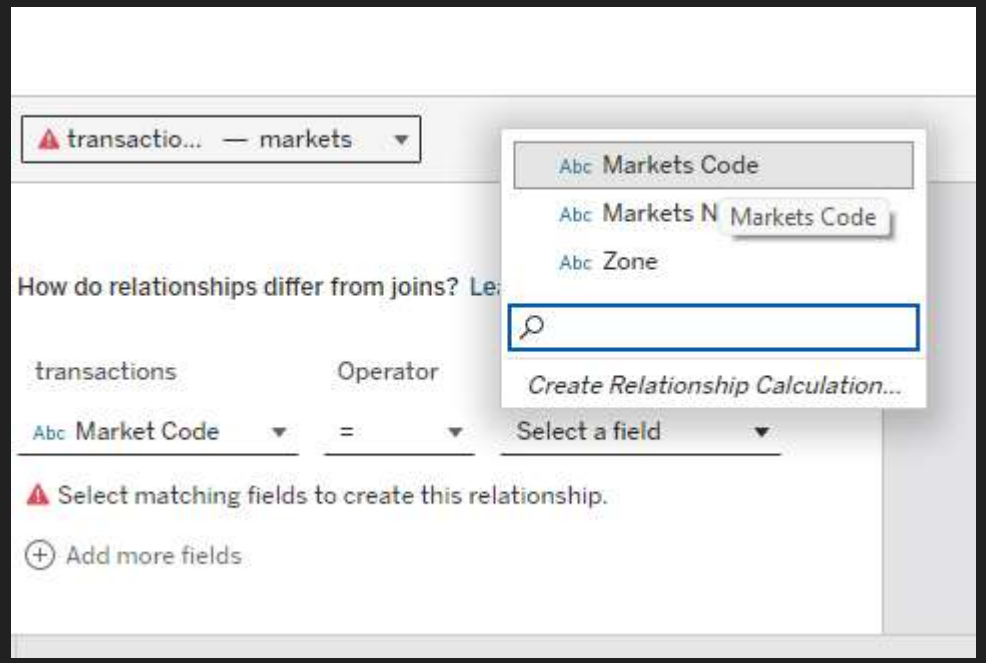


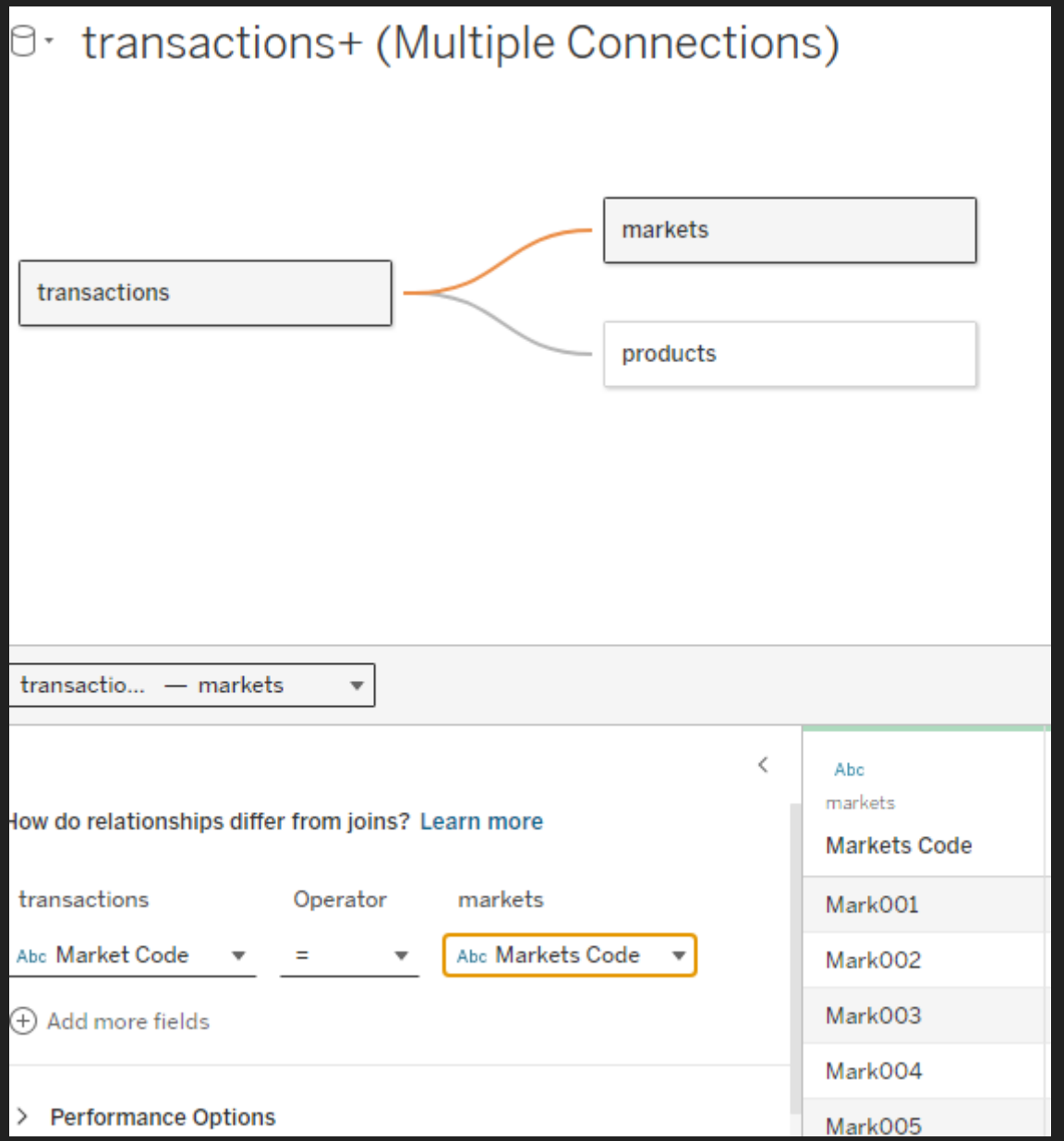
Here, it shows error



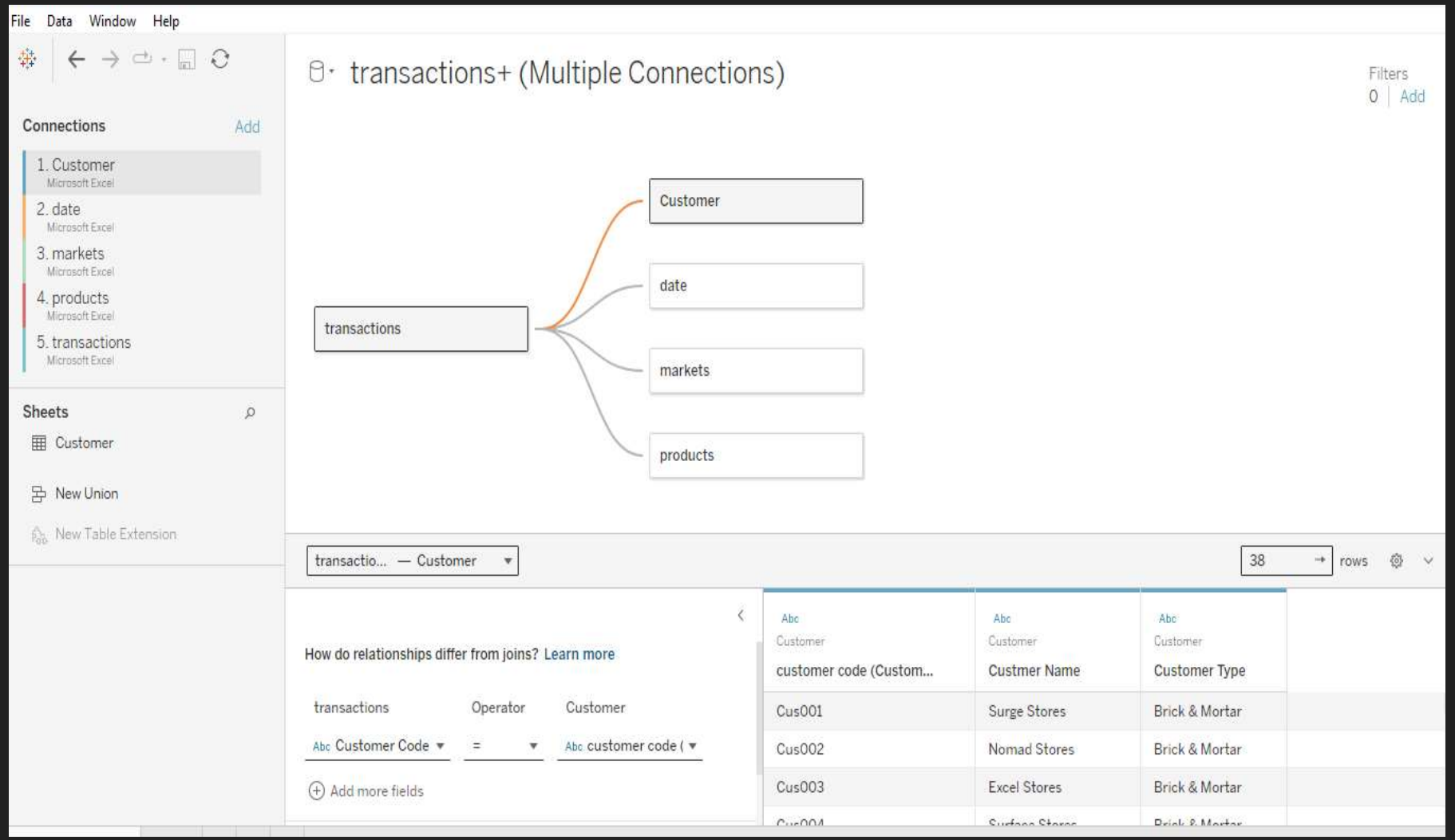
From here, we can select the common columns in both the flies.

To do that just click on the drop down as shown, identify the common column and select.


transactio... — markets
Abc Markets Code
Abc Markets N
Markets Code
Abc Zone
Create Relationship Calculation...
How do relationships differ from joins? Le
transactions
Operator
Abc Market Code
=
Select a field
Select matching fields to create this relationship.
Add more fields


transactions+ (Multiple Connections)
transactions
markets
products
transactio... — markets
How do relationships differ from joins? Learn more
transactions
Operator
markets
Abc Market Code
=
Abc Markets Code
Add more fields
Performance Options
Abc
markets
Markets Code
Mark001
Mark002
Mark003
Mark004
Mark005

Now we have build a relationship between all the files. Lets do data cleaning

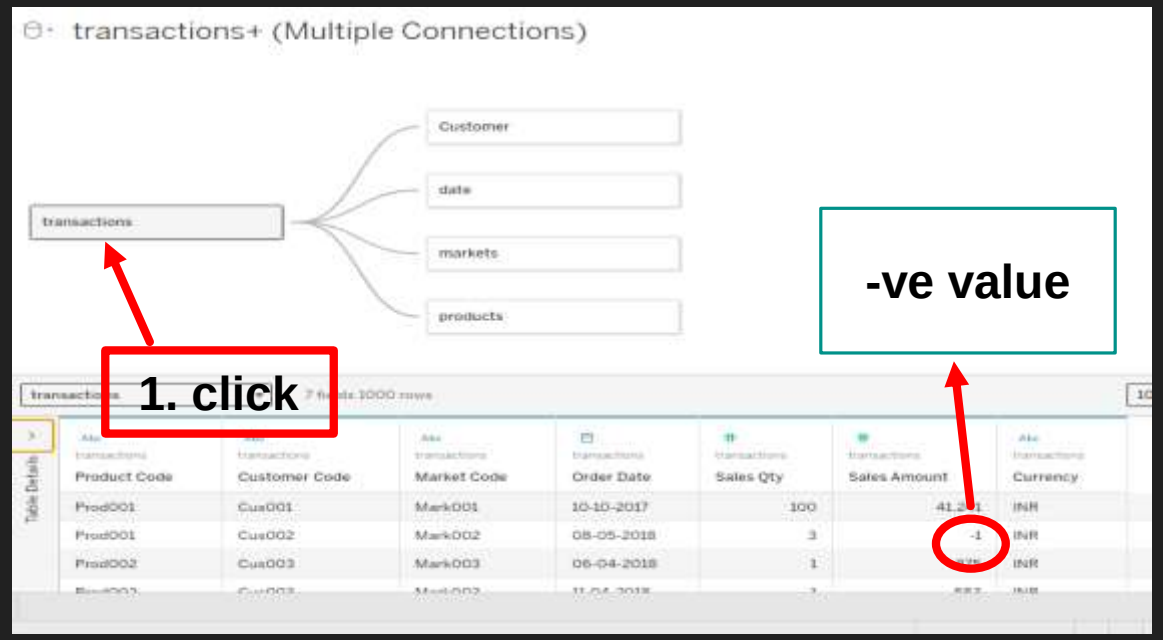


Data Cleaning

You need to go through the excel files and identify what need to be change.

In this project, in transaction file we have sales amount column where we have –ve values

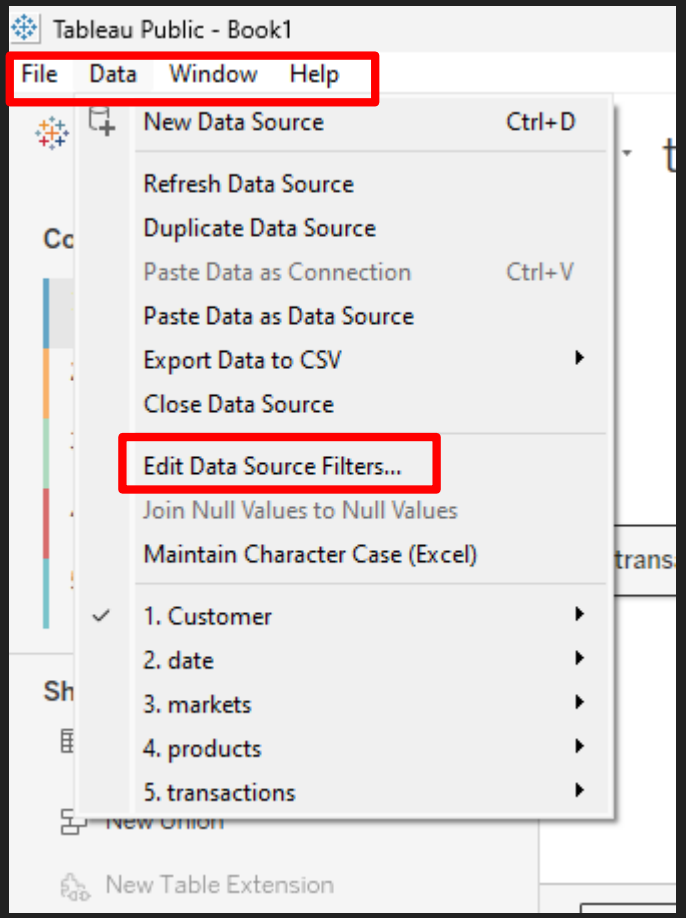
To do so, follow the steps.

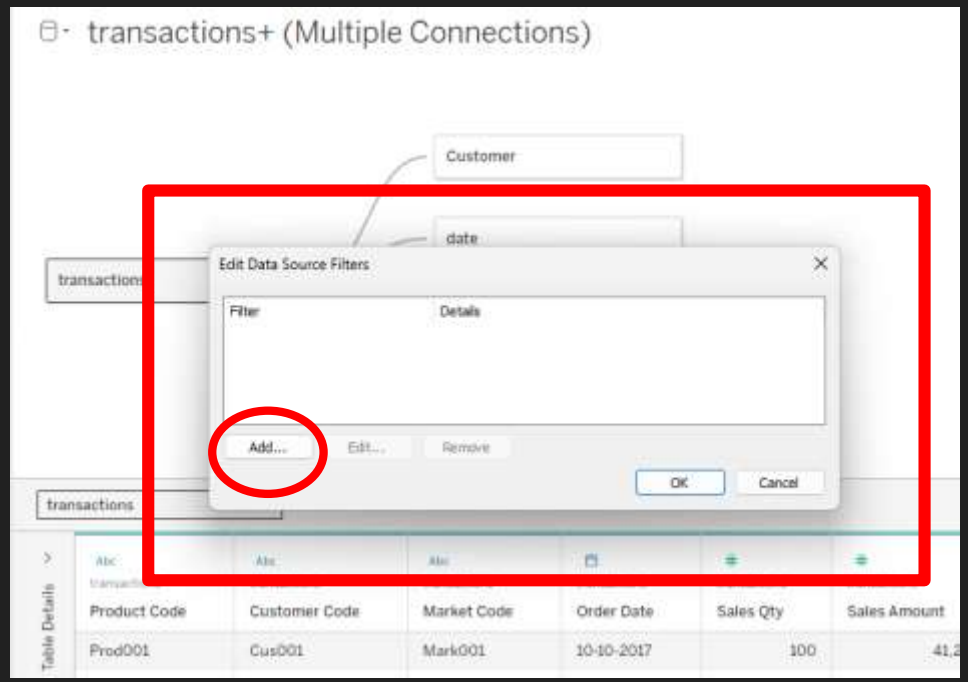


To clean these –ve values,

Click on data

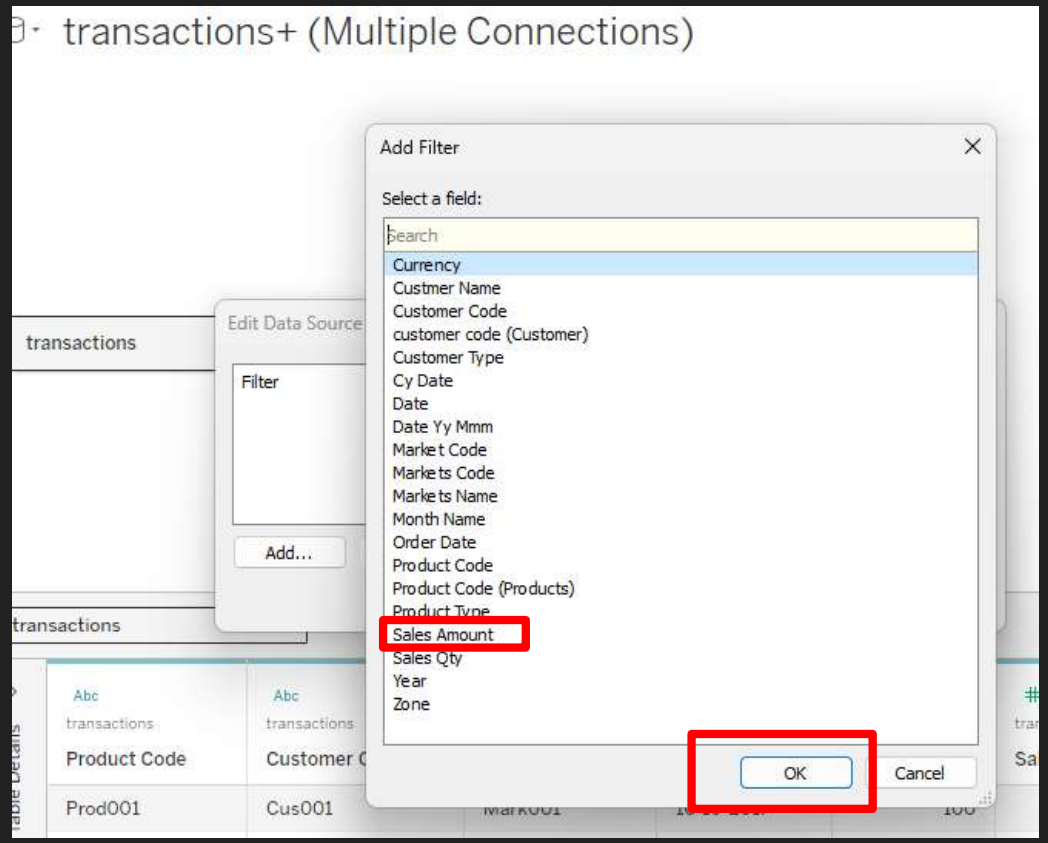
Click on Edit Data Source Filters





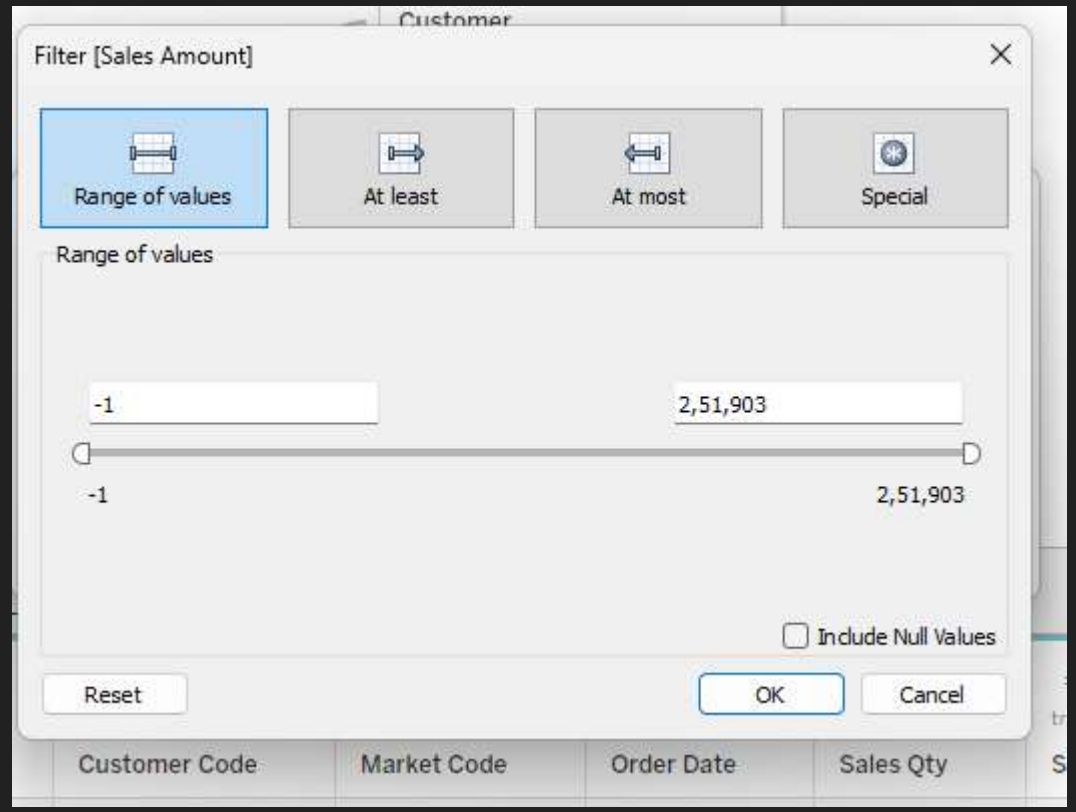
After clicking on Edit Data Source a popup will show, as shown.

Click on add



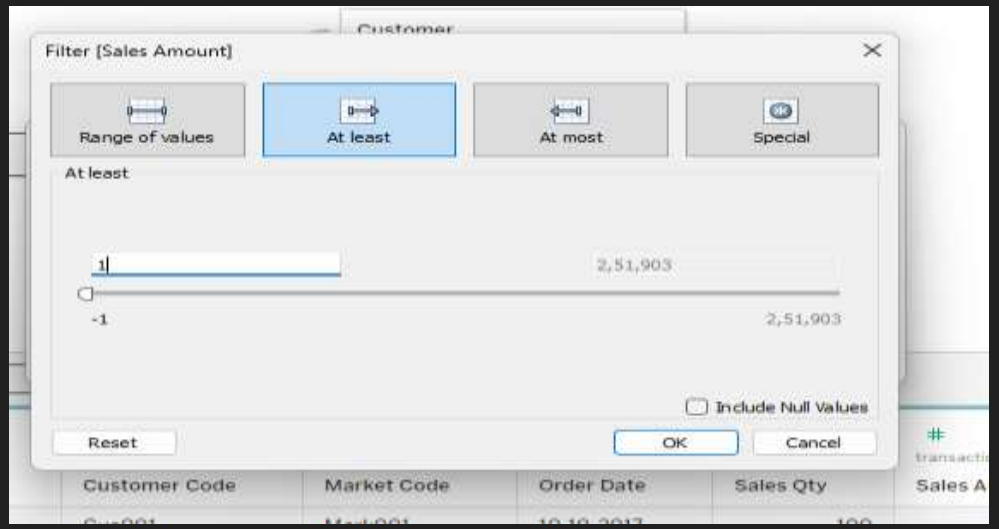
Here we need to select a filed (column) where the filter need to apply.

Click ok.



As, sales amount shouldn't be in negative I will change this to "at least" 1.

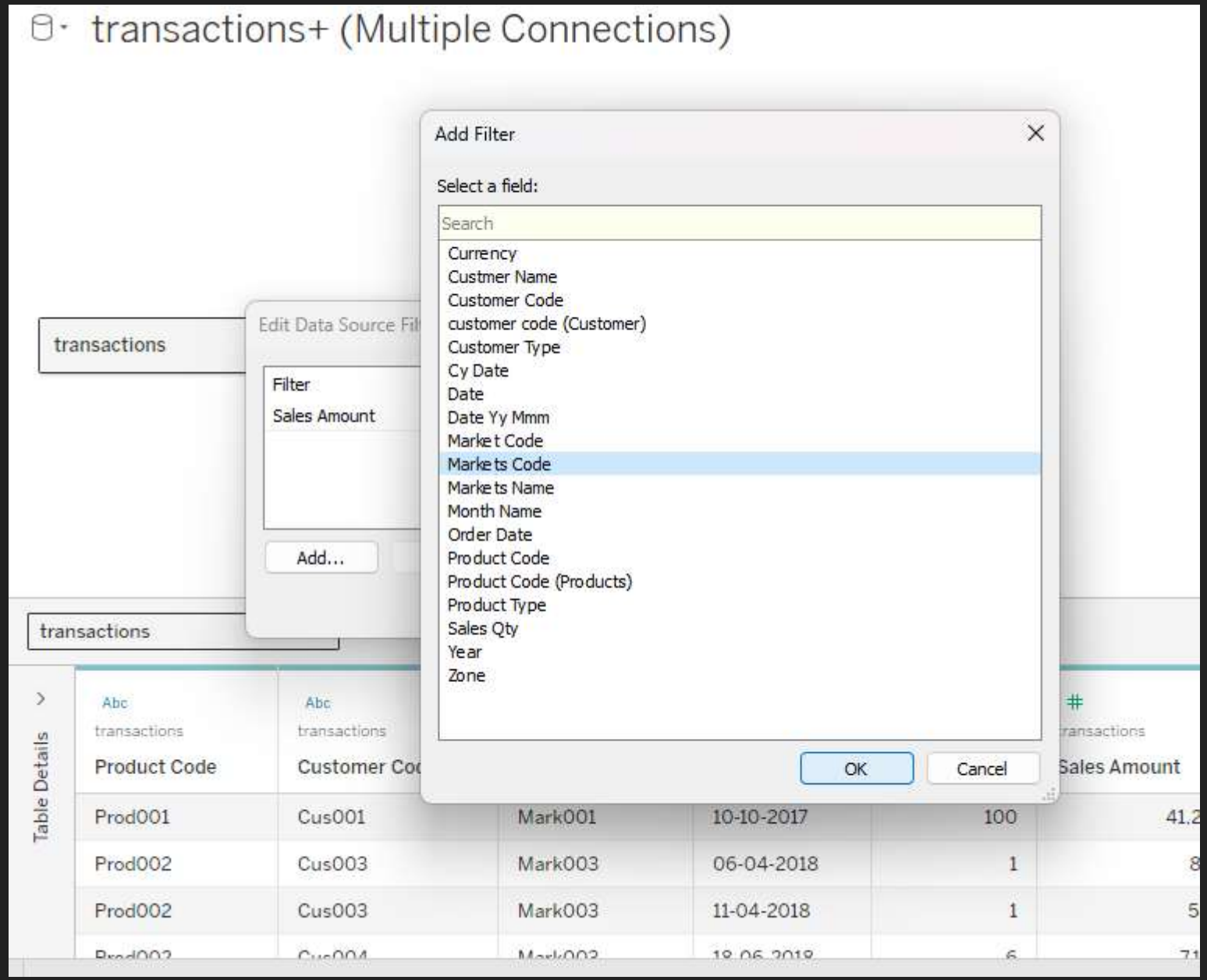
Change the value -1 to 1 as shown.



Click ok. And click ok

Tableau automatically refresh itself,

Now you don’t see any – ve values in sales amount column.



This company have business in India so, in market code field I came across two other countries

I want to filter them, for this
Click on Data
Click on Edit data source filter
Click on Add

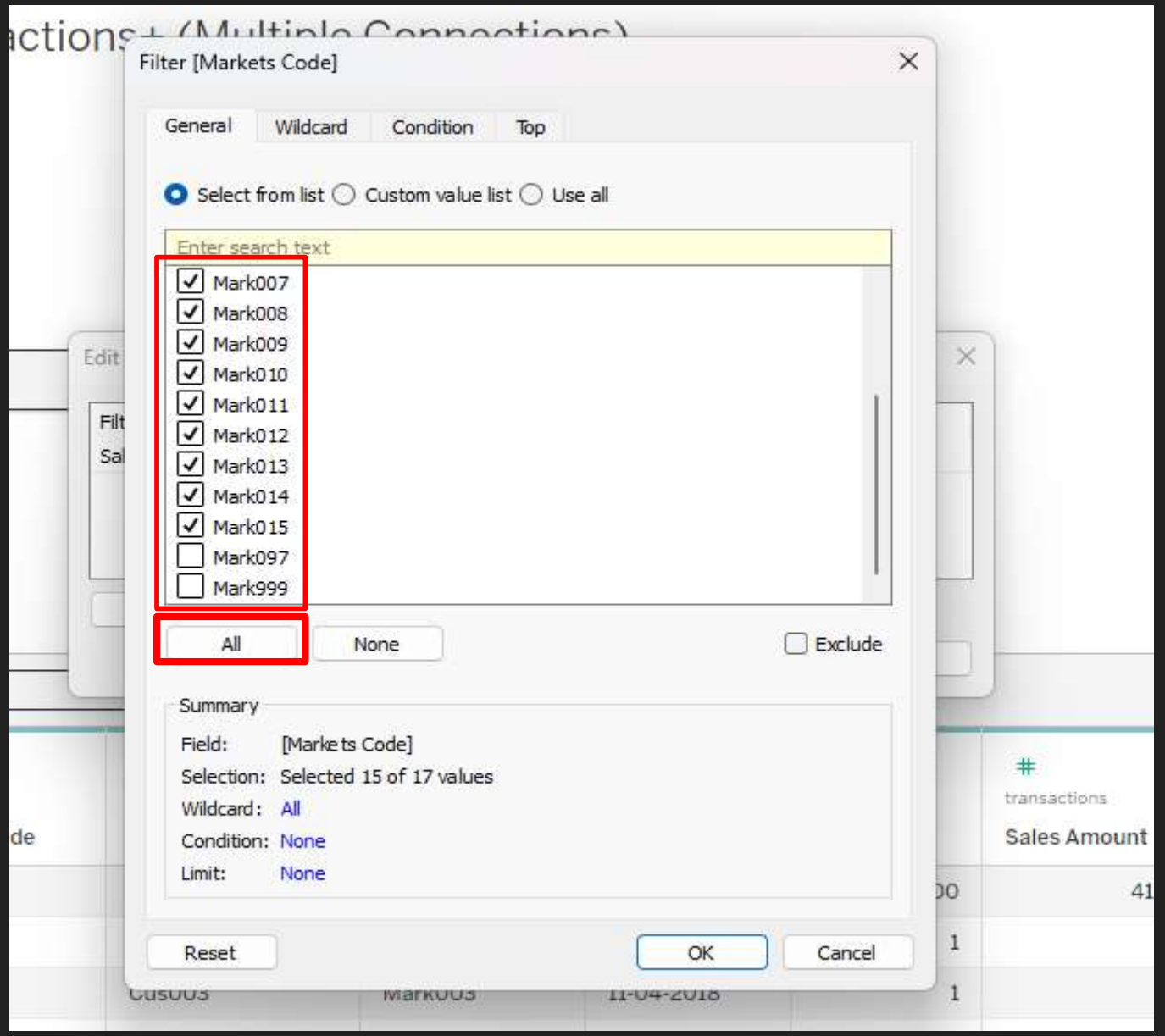
Here select field as “market code “

Click ok.

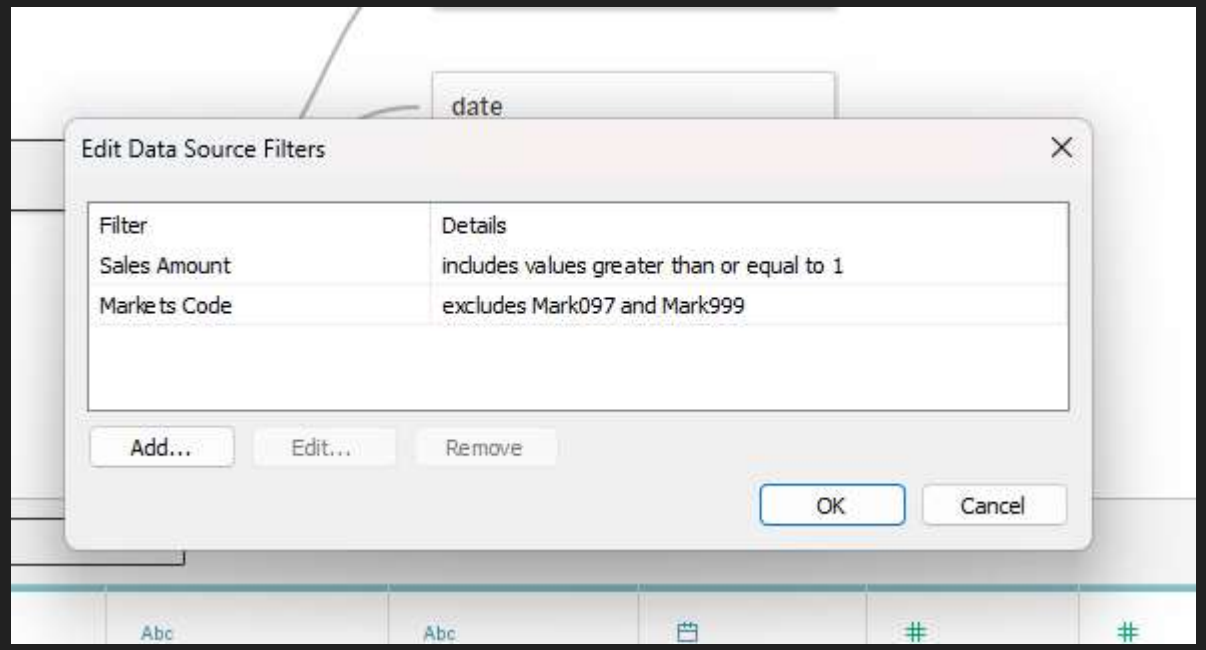
	A	B	C	D
1	markets_code	markets_name	zone	
2	Mark001	Chennai	South	
3	Mark002	Mumbai	Central	
4	Mark003	Ahmedabad	North	
5	Mark004	Delhi NCR	North	
6	Mark005	Kanpur	North	
7	Mark006	Bengaluru	South	
8	Mark007	Bhopal	Central	
9	Mark008	Lucknow	North	
10	Mark009	Patna	North	
11	Mark010	Kochi	South	
12	Mark011	Nagpur	Central	
13	Mark012	Surat	North	
14	Mark013	Bhopal	Central	
15	Mark014	Hyderabad	South	
16	Mark015	Bhubaneshwar	South	
17	Mark097	New York		
18	Mark999	Paris		

This popup will appear now
Click on All
Unselect the market code which needs to filter .

Click Ok.



Click Ok



	A	B	C	D	E	F	G	H	I
1	product_code	customer_code	market_code	order_date	sales_qty	sales_amount	currency		
2	Prod001	Cus001	Mark001	10-10-2017	100	41241	INR		
3	Prod001	Cus002	Mark002	08-05-2018	3	-1	INR		
4	Prod002	Cus003	Mark003	06-04-2018	1	875	INR		
5	Prod002	Cus003	Mark003	11-04-2018	1	583	INR		
6	Prod002	Cus004	Mark003	18-06-2018	6	7176	INR		
7	Prod003	Cus005	Mark004	20-11-2017	59	500	USD		
8	Prod003	Cus005	Mark004	22-11-2017	36	250	USD		
9	Prod003	Cus005	Mark004	23-11-2017	39	21412	INR		
10	Prod003	Cus005	Mark004	27-11-2017	35	19213	INR		
11	Prod003	Cus005	Mark004	28-11-2017	310	170185	INR		
12	Prod003	Cus005	Mark004	29-11-2017	184	101194	INR		
13	Prod003	Cus005	Mark004	30-11-2017	35	19213	INR		
14	Prod004	Cus005	Mark004	29-11-2017	17	9426	INR		
15	Prod004	Cus005	Mark004	19-12-2017	1	218	INR		
16	Prod005	Cus005	Mark004	07-08-2018	5	3093	INR		
17	Prod003	Cus006	Mark004	04-12-2017	58	30306	INR		
18	Prod005	Cus006	Mark004	29-06-2018	38	52319	INR		
19	Prod005	Cus006	Mark004	02-07-2018	93	126296	INR		
20	Prod005	Cus006	Mark004	03-07-2018	79	107500	INR		
21	Prod005	Cus006	Mark004	04-07-2018	1	273	INR		
22	Prod005	Cus006	Mark004	06-07-2018	3	3574	INR		
23	Prod005	Cus006	Mark004	13-07-2018	1	273	INR		

transactions

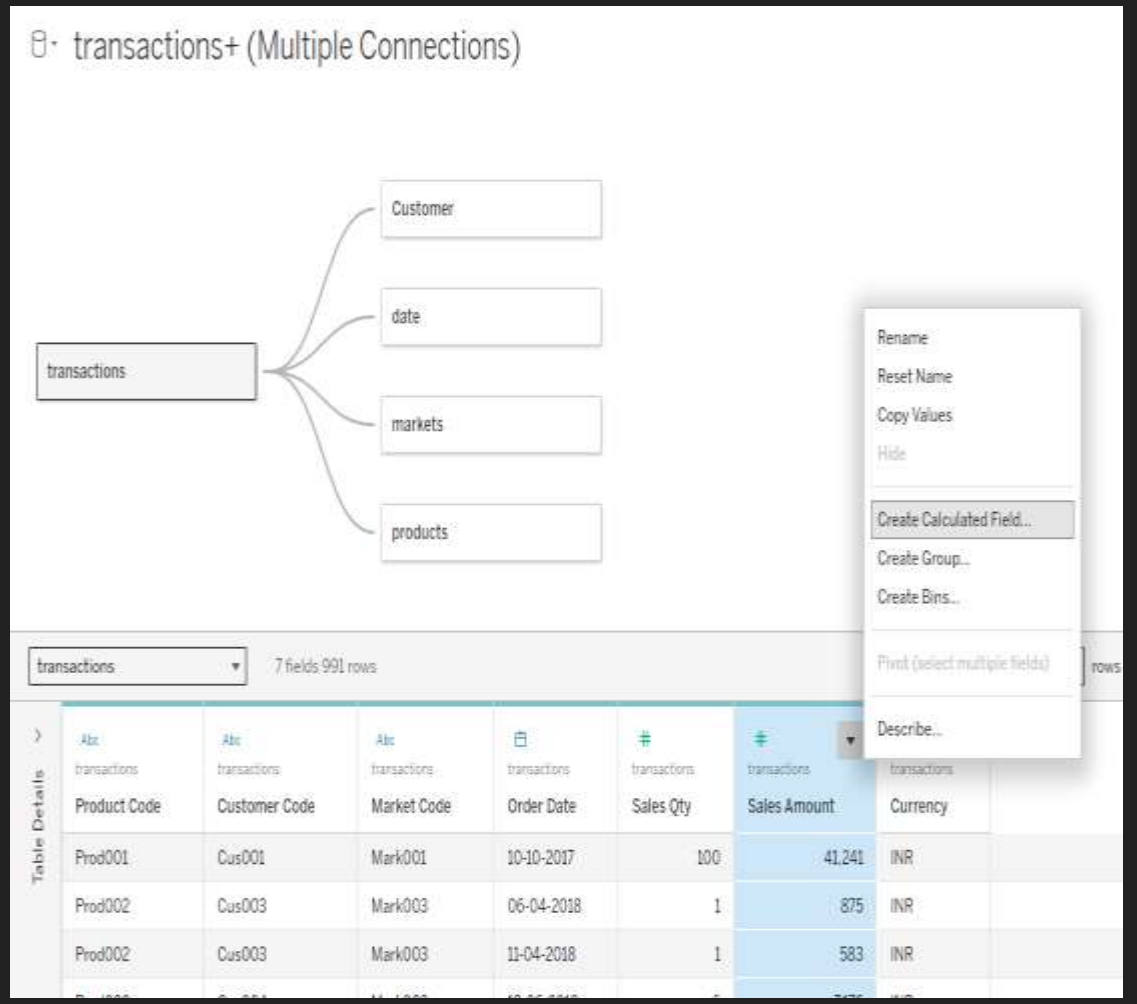
The currency field has 2 types of currency, where I need only INR, so I am changing the USD to INR.

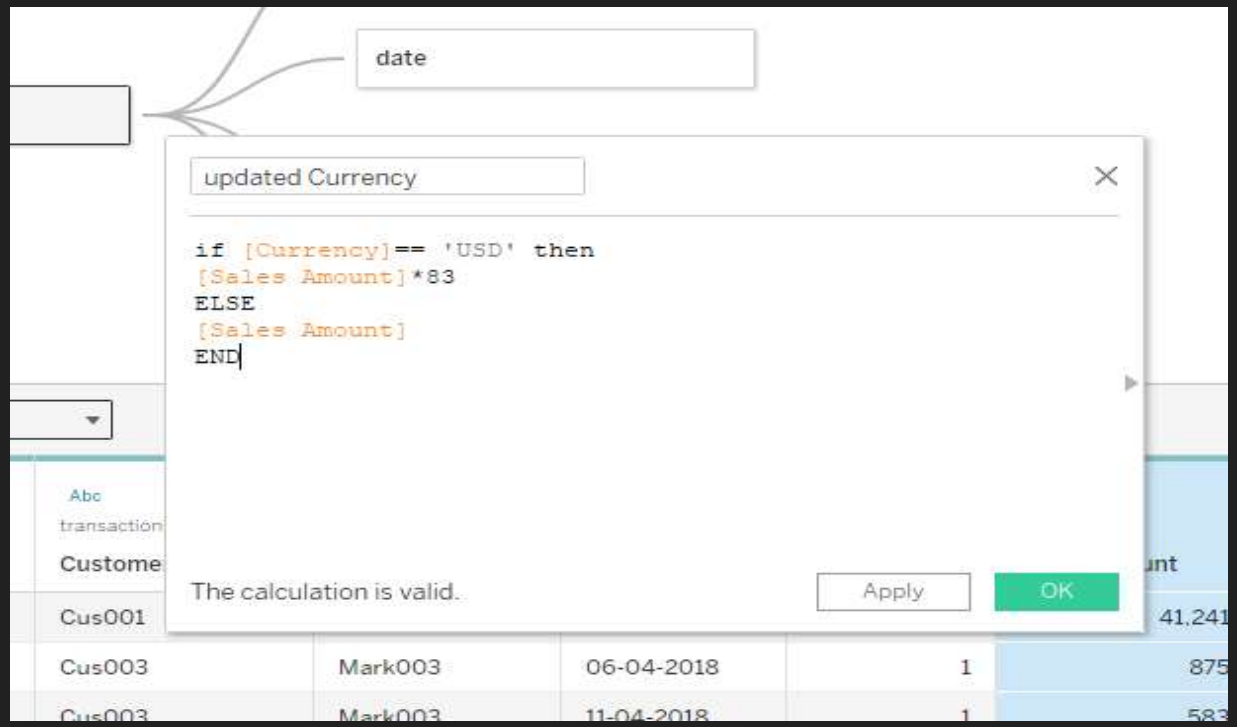
Click on drop down of Sales amount where you can select the “Create Calculated field”

Calculated filed helps us to communicate with tableau through small codes.

Here we need to tell tableau that if the sales amount currency is equal to USD then multiply with 83 (1usd = 83 rupees) other wise give the sales amount .

So, after clicking on calculated field





I changed the name to Updated Currency

Write a code as shown

Click on apply and Ok.

As you can see the changes.

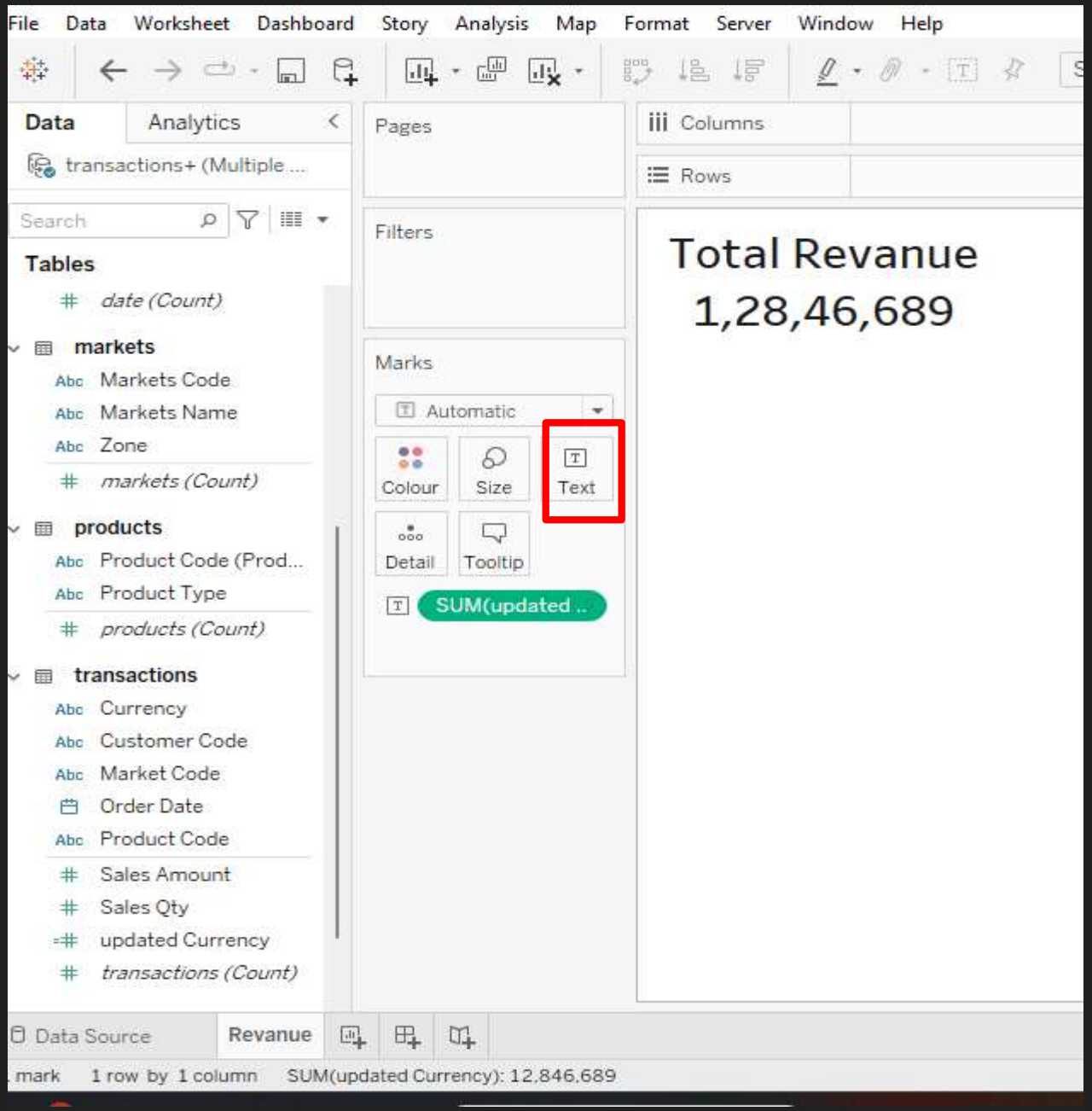
Prod003	Cus005	Mark004	20-11-2017	59	500	USD
Prod003	Cus005	Mark004	22-11-2017	36	250	USD

Prod003	Cus005	Mark004	20-11-2017	59	500	USD
Prod003	Cus005	Mark004	22-11-2017	36	250	20,750 USD

Data Visualisation

Data Visualization is a graphical representation of information and data, utilizing visual elements like charts, graphs and maps to make complex data more understandable and accessible. It helps in identifying trends, patterns and outliers thereby facilitating informed decision-making and effective communication of insights.

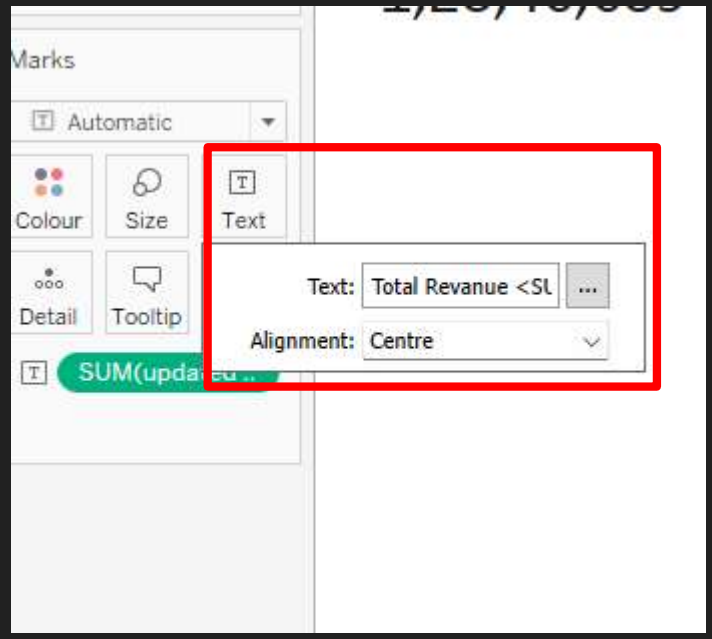
By transforming raw data into visual context, data visualization enables users to see connections and relationships that might be missed in text-based data, making it a crucial tool across various industries for analysing and presenting data.



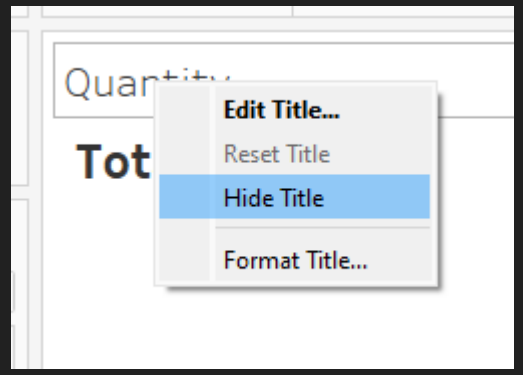
SHEET 1: Total Revenue

Just drop the "updated currency" in the text

Sum of Total sales

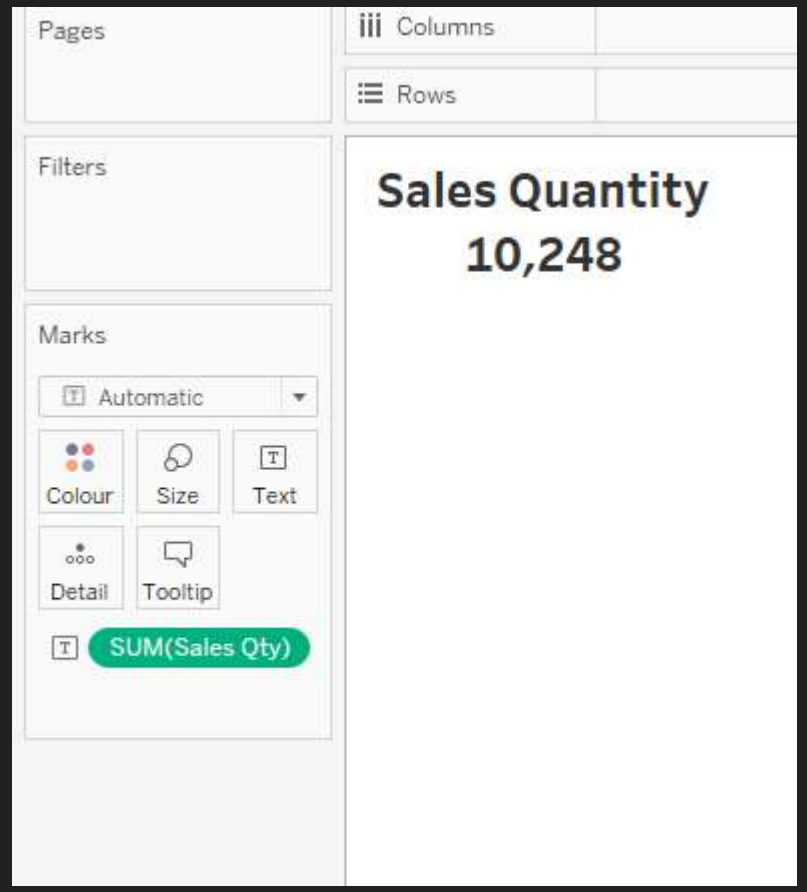


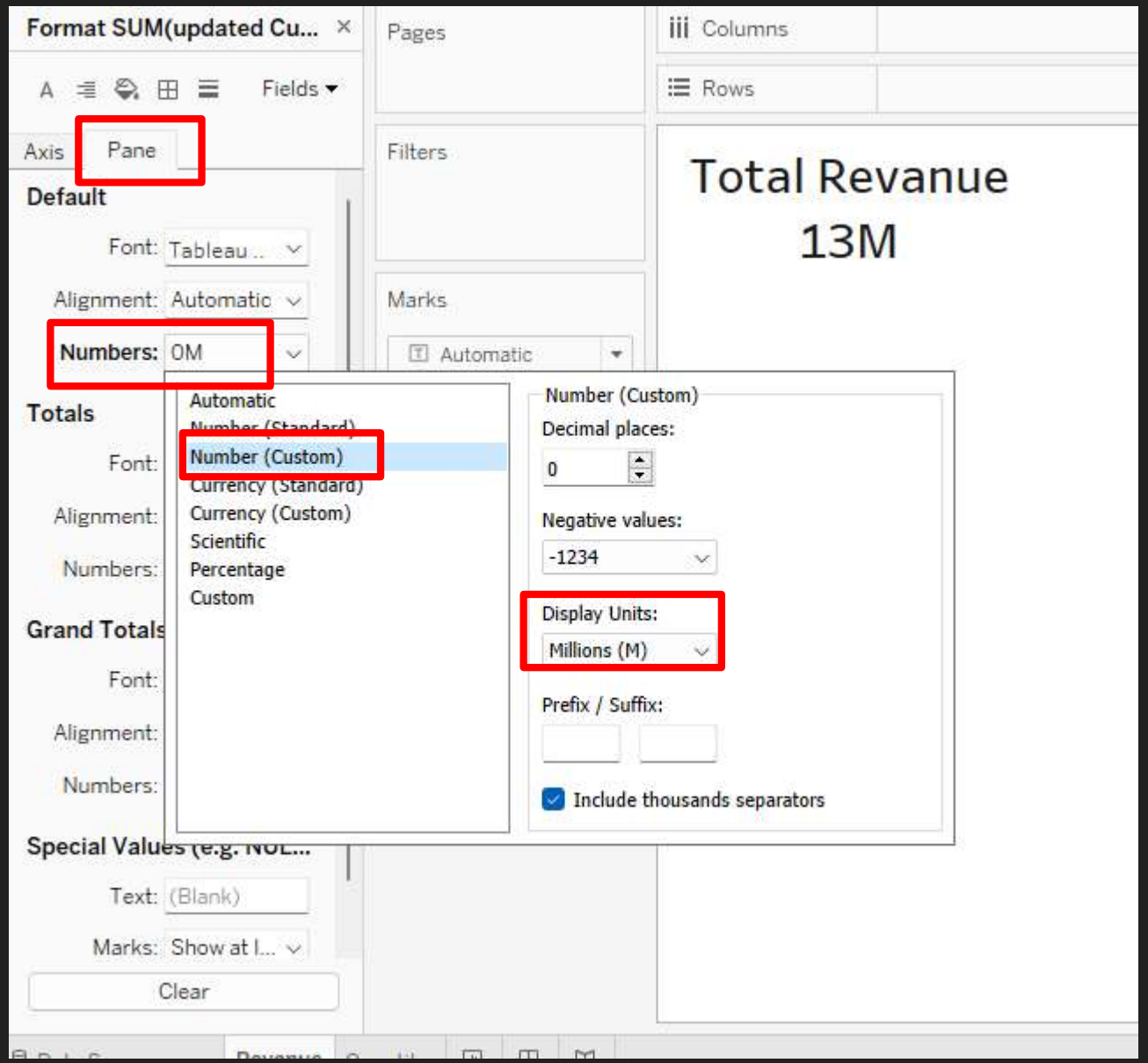
Click on text if you want to format then you can do it from this popup as shown.



If you want to hide title then, right click on title and select hide title.

SHEET-2 : Total Quantity





In sheet 1 I changed the total revenue number into Million (13M) to do so,

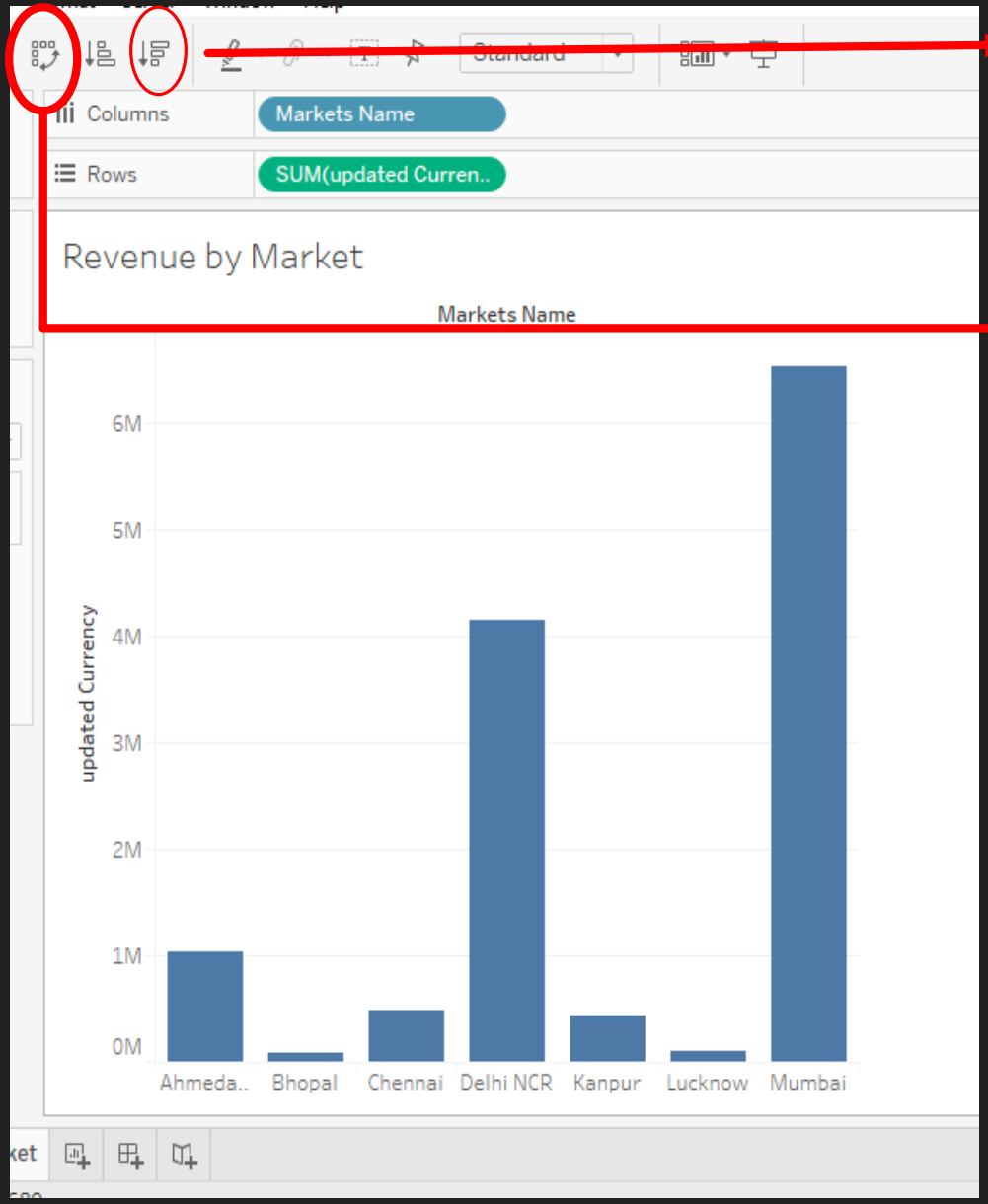
Right click on sum(updated currency) in Marks section.

Click on format

In pane click on numbers – number(custom)

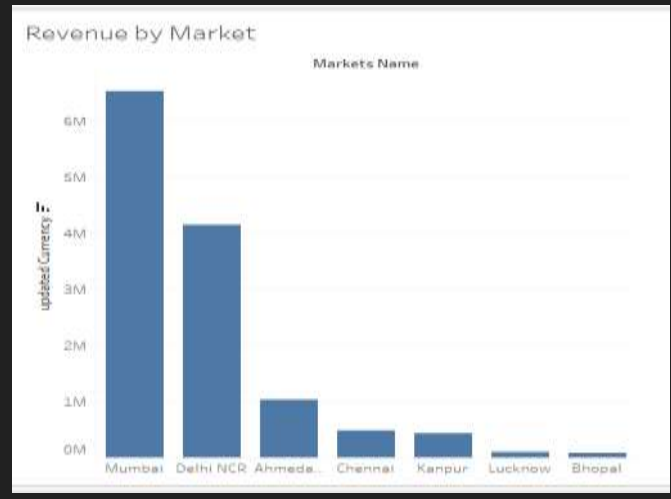
Make the “display units” to Millions.

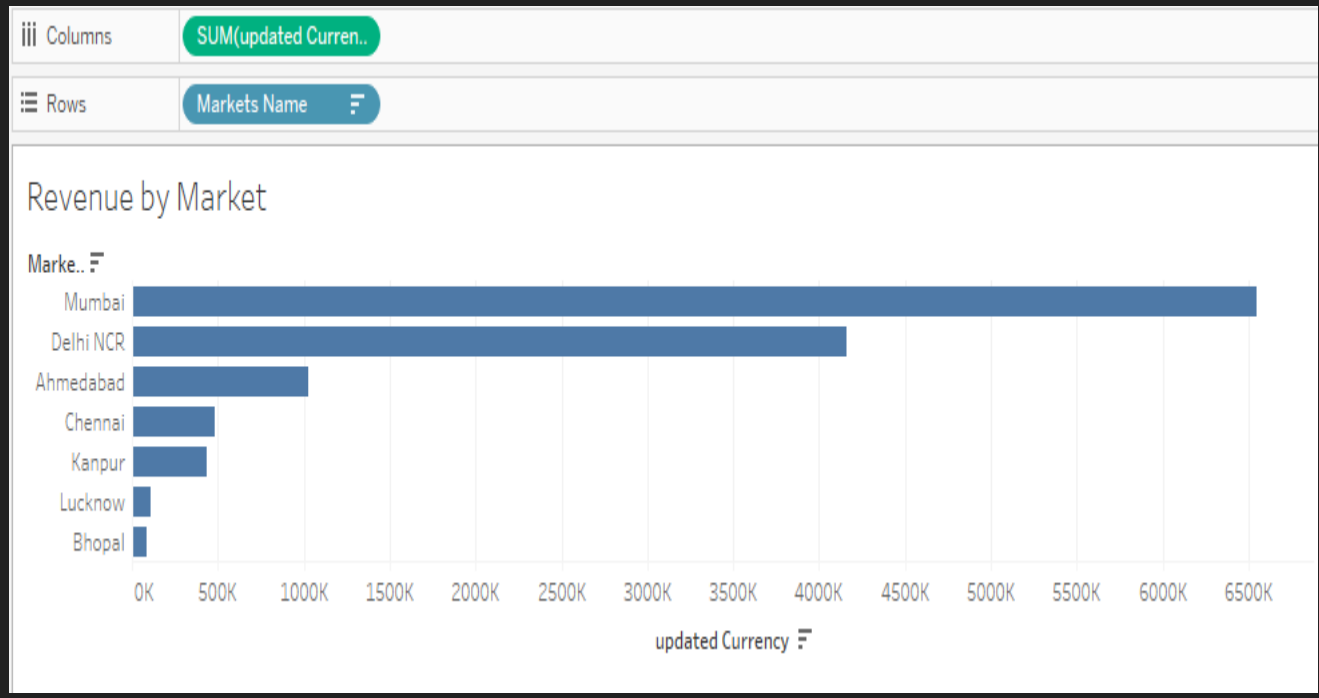
SHEET 3: Revenue by Market names



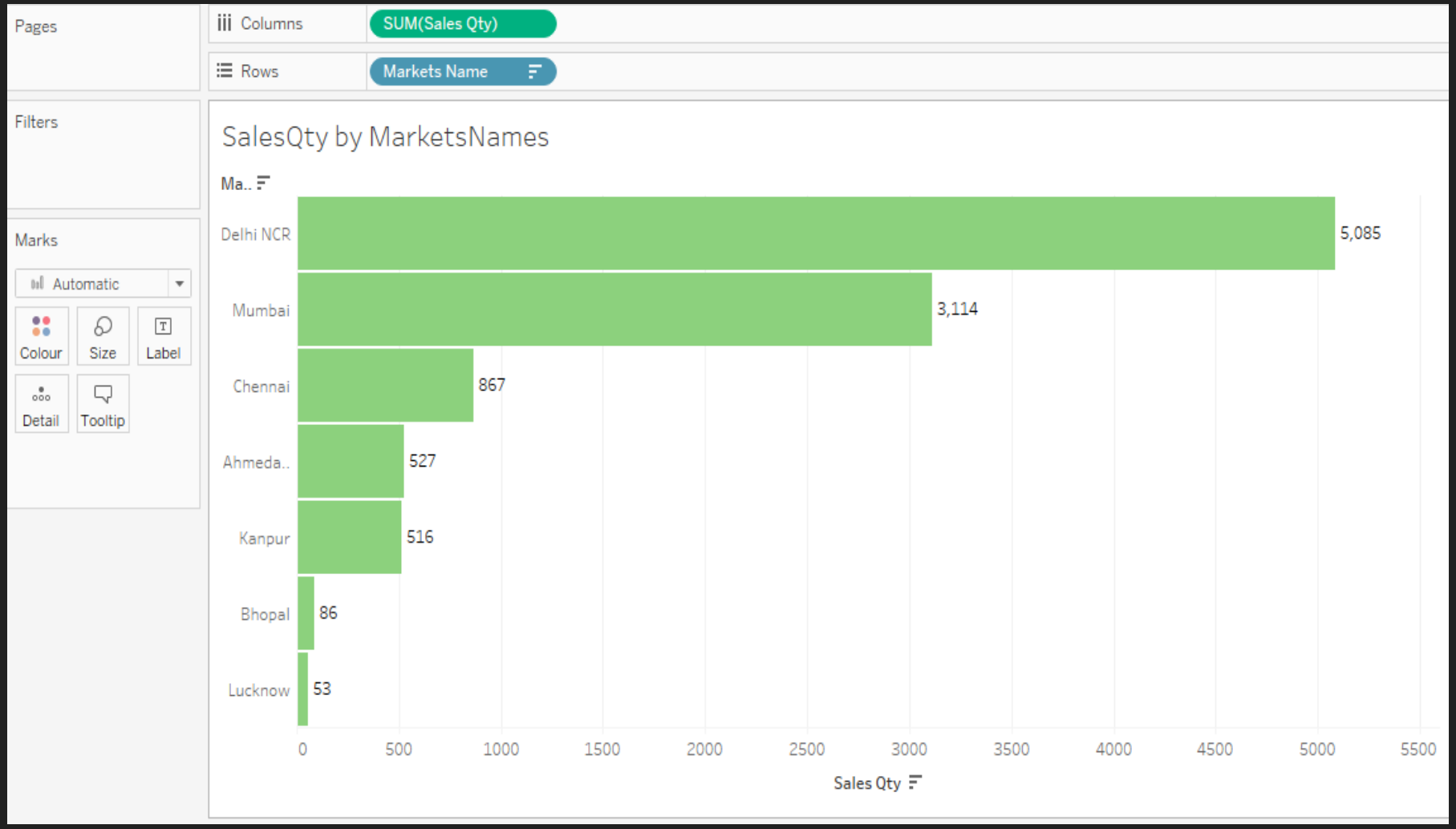
To sort the chart click here

To shift the Columns & Rows

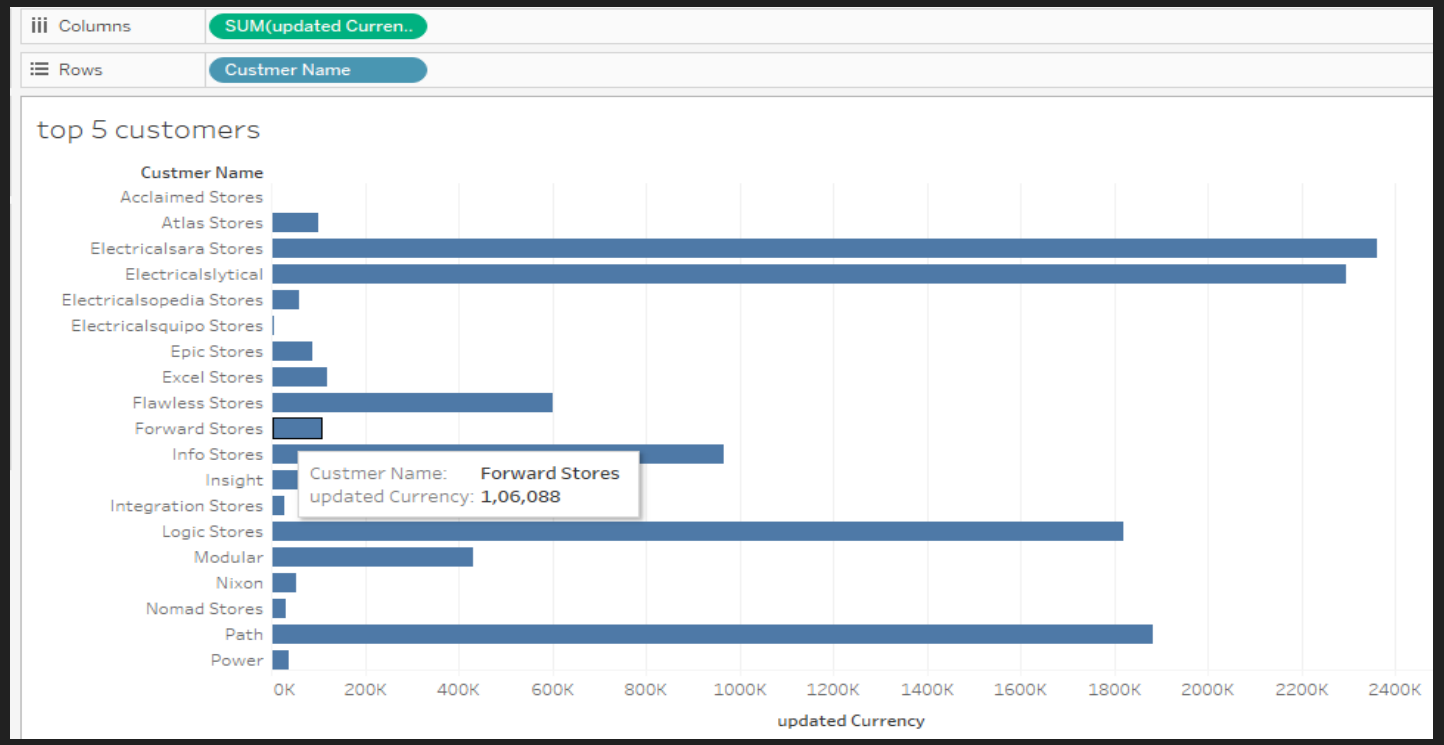




In the same way, create sheet 4 : Sales QTY by market name



Sheet 5: Top 5 Customers

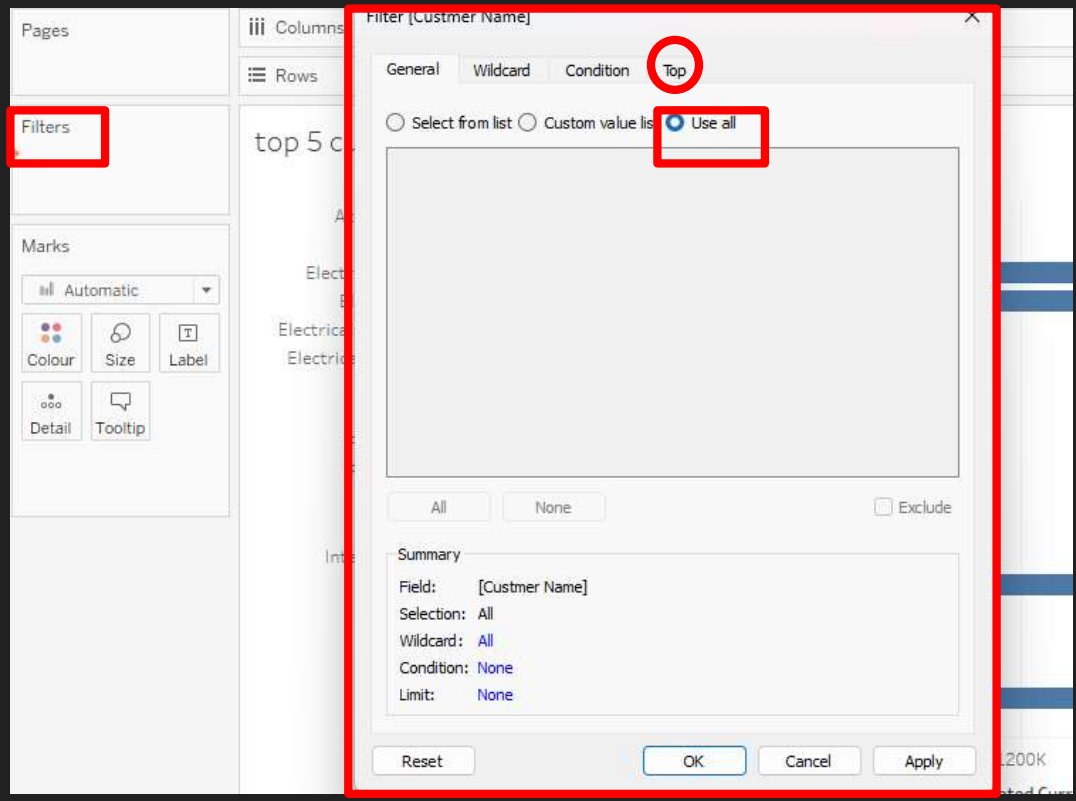


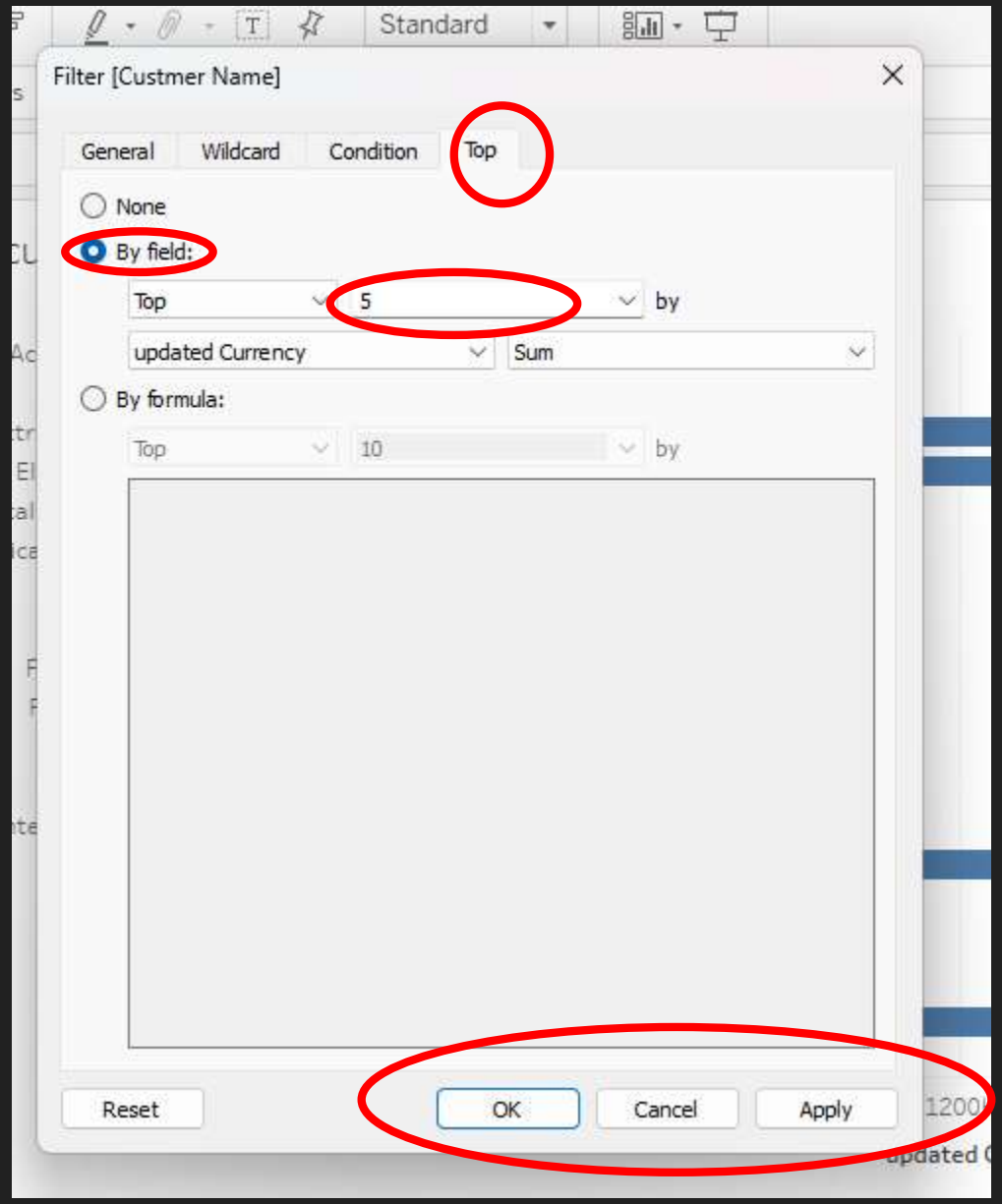
When you drop customer names into filter this popup will show, select “use all” radio button

Click on “top tab”.

Drag and drop customer names in rows & updated currency in columns

Now I want only top 5 customers, so drag and drop the customers name in filter section as shown below.

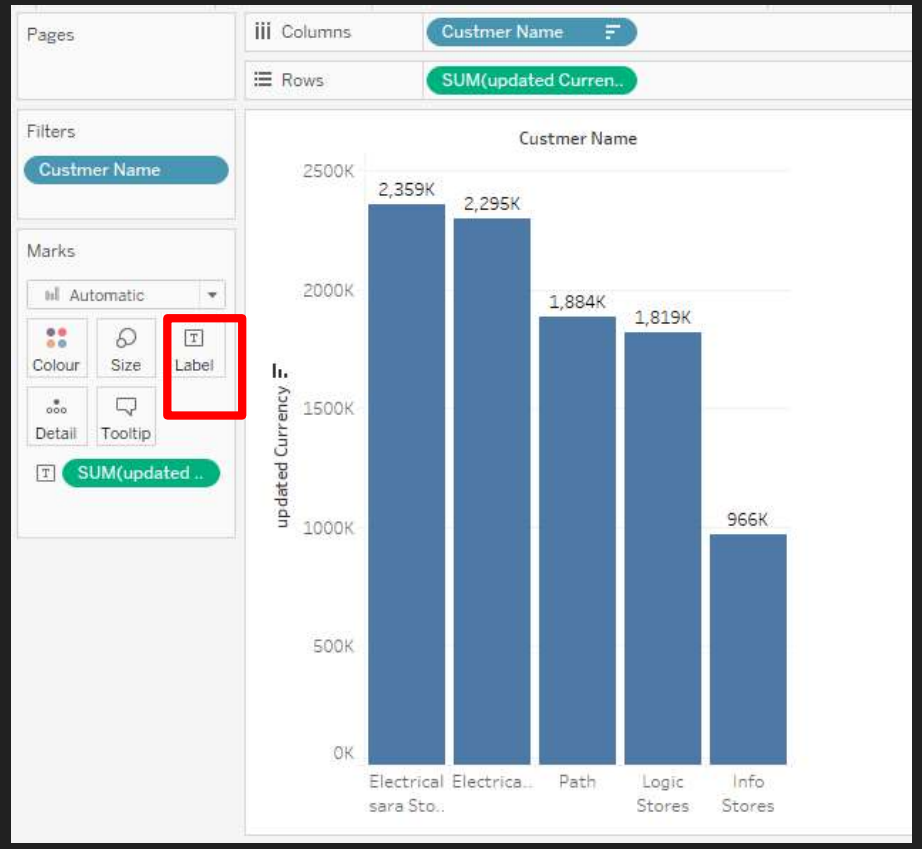




Select the “by field” radio button

Set the default value as 5.

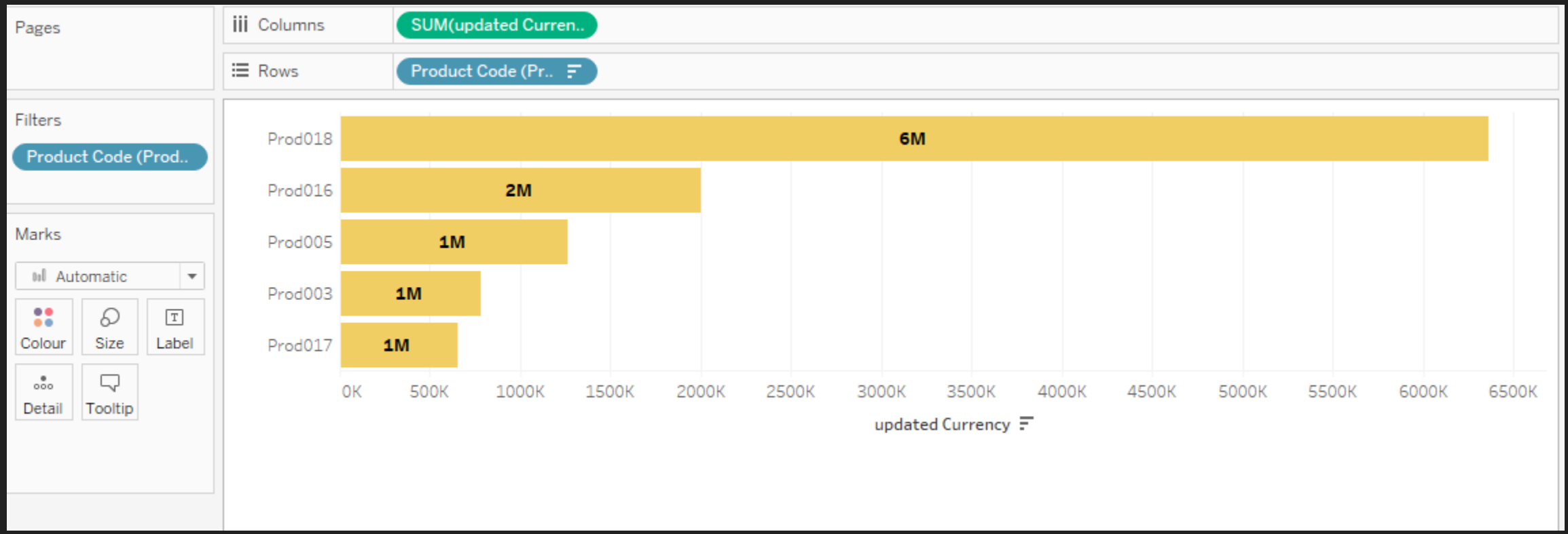
Click on apply & Ok.



To get the values on the bar,

Just drop the updated currency in text field .

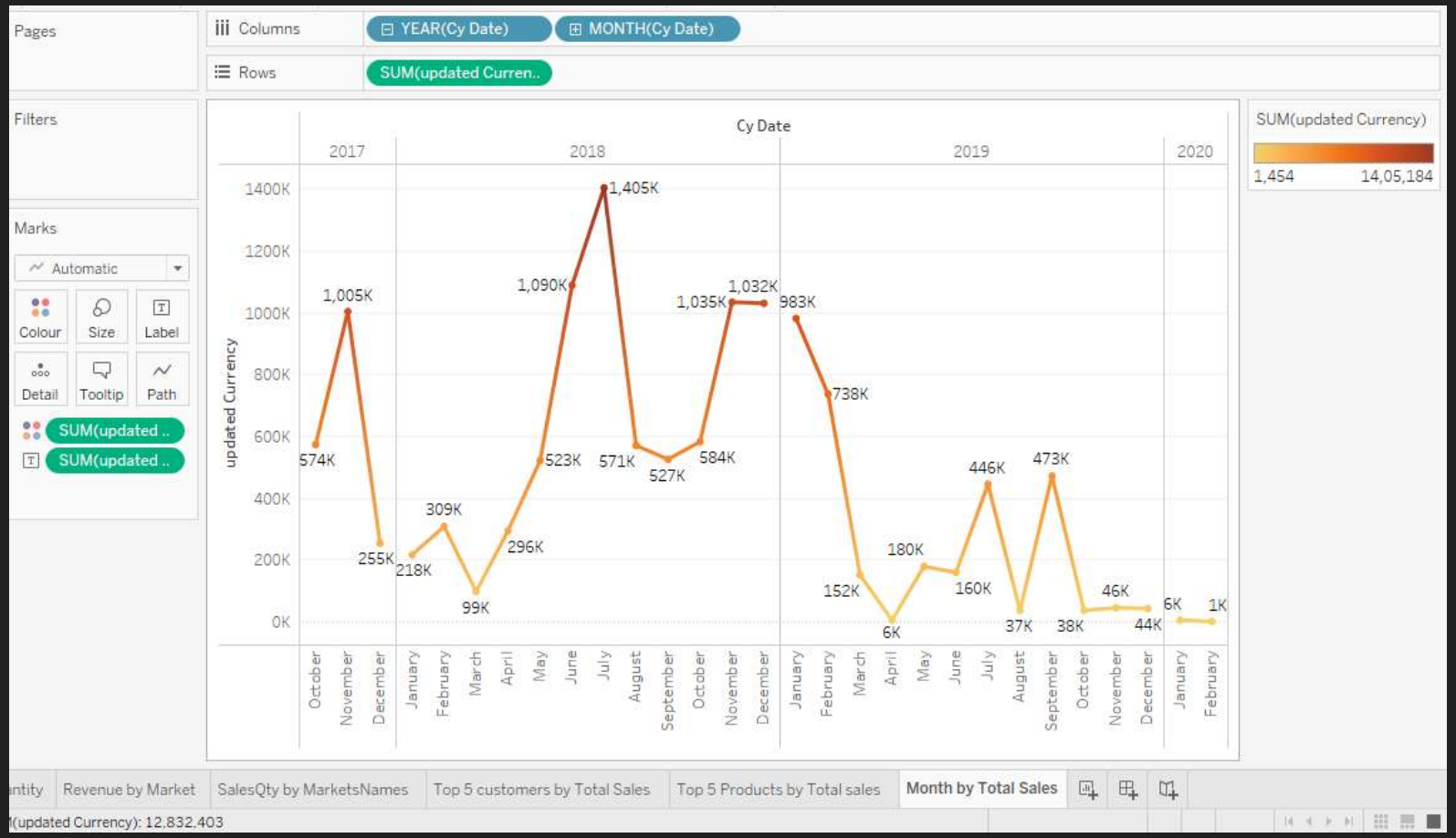
Sheet 6: top 5 products by Total Sales



Just duplicate the sheet 5 and change the row to “Product Code”

If required then do some formatting .

Sheet 7 : Month by Total Sales



Drag and drop the cy date & Total sales.

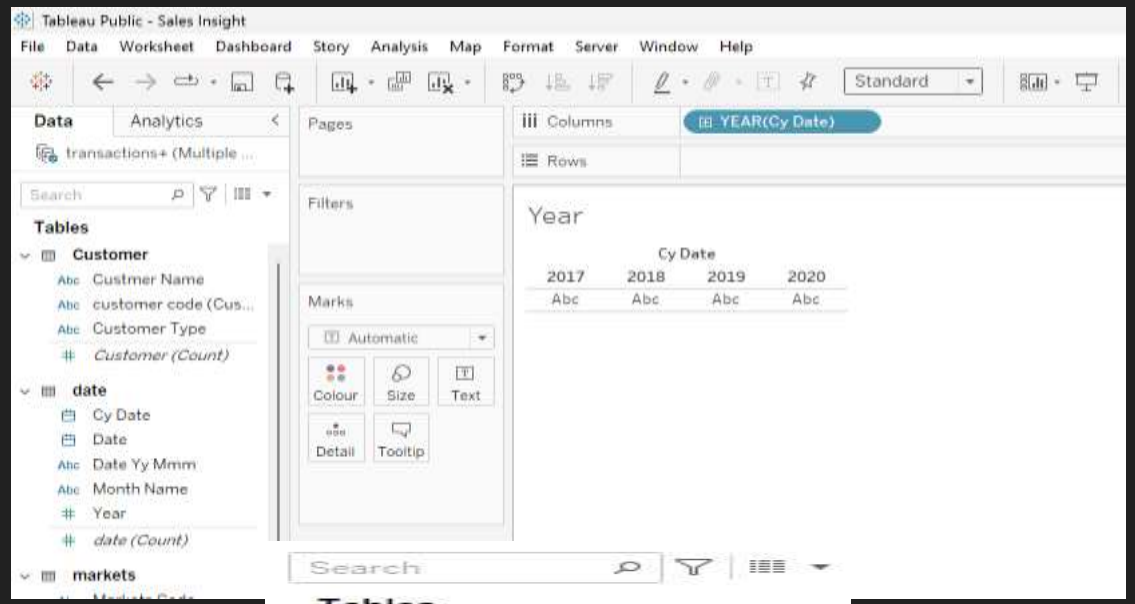
We can break down the year to Quarterly and monthly by clicking the + symbol in the chart.

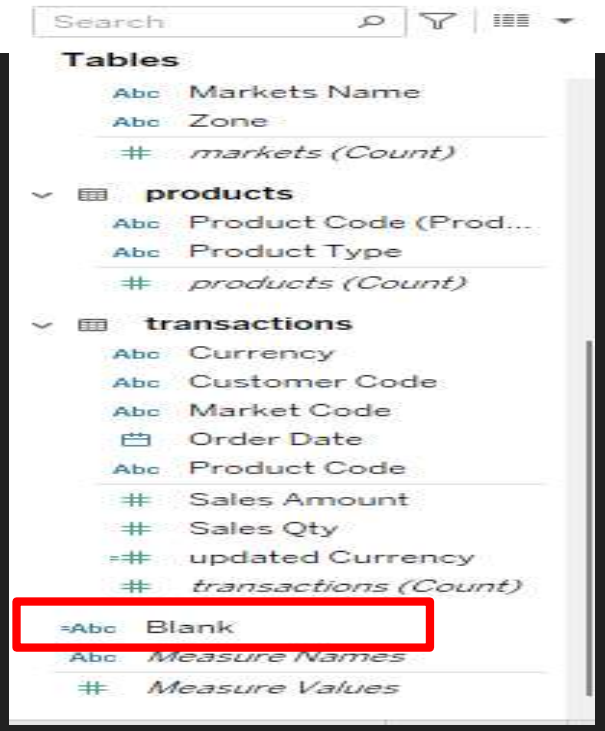
I choose Yearly and monthly and to get the values, we need to drop the total sales in Text field .

To get the colour variation drop the total sales in colour field in marks section.

Darker the colour higher the sales
Lighter the colour lower the sales

Sheet 8 : Year





Drag and drop the cy Date into columns.

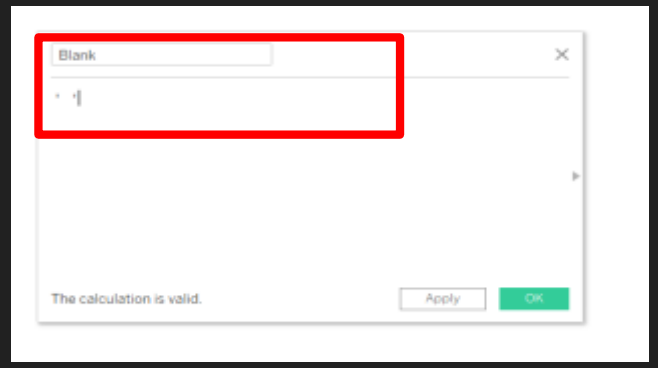
Why we are dropping Cy date why not year?
Because we want to break down further.

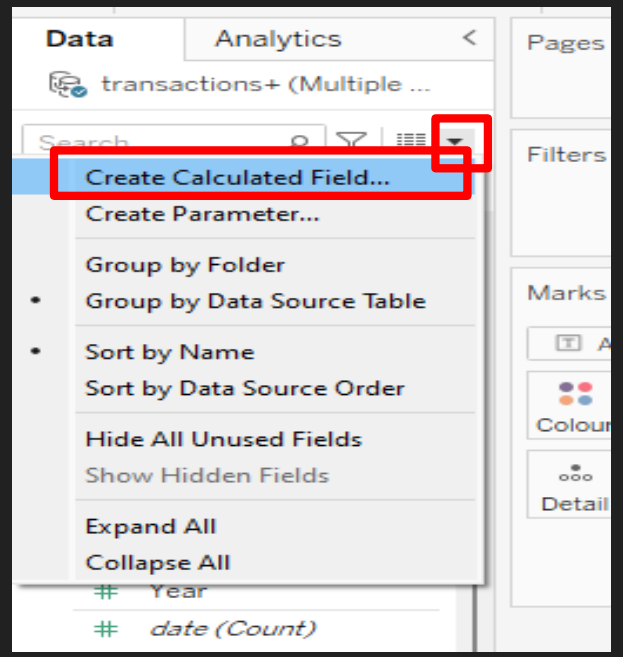
I want row to be blank, for that we can create the empty field called “blank” and drop that into “text”

To create Blank field
Open a calculated
Field

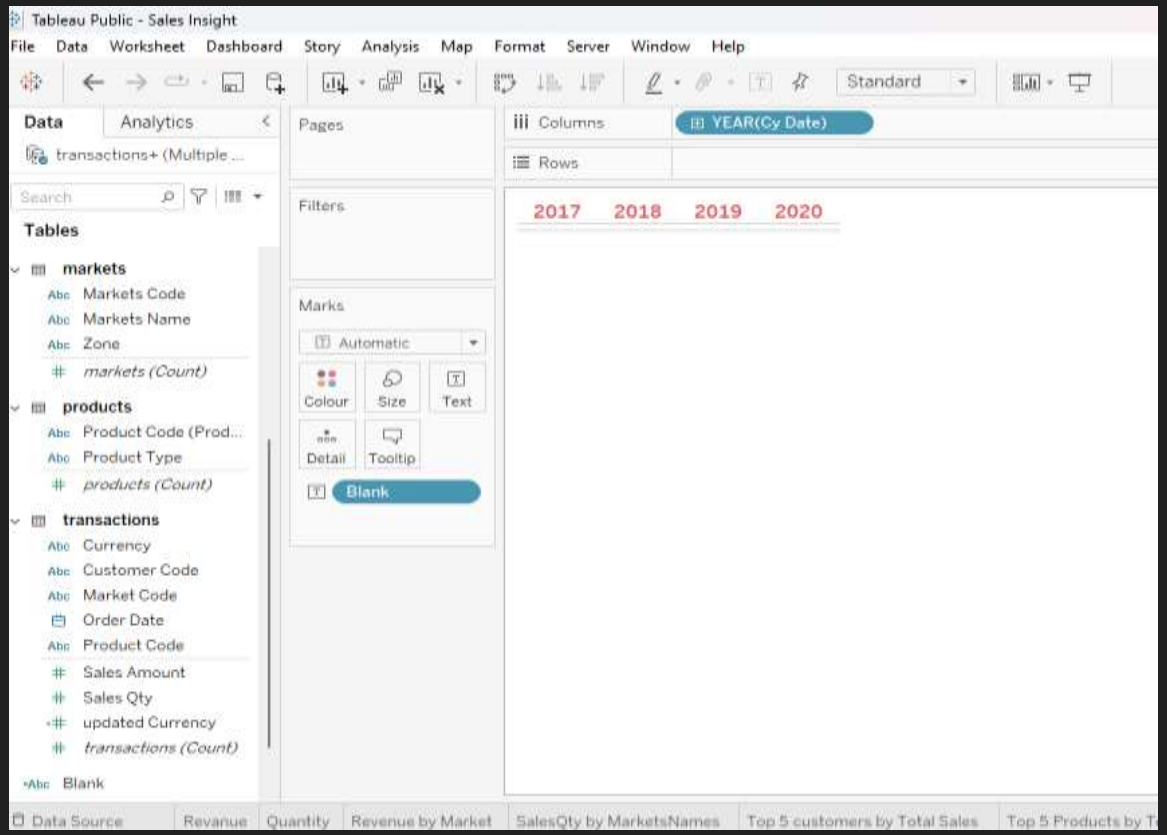
Name the field as
Blank

Please type ‘ ‘ as shown





Click Ok



Hide the Title and column header

As soon as you drop the blank field into text, the row text (ABC) change to blank .

To format, just right click on cy date which is in Columns

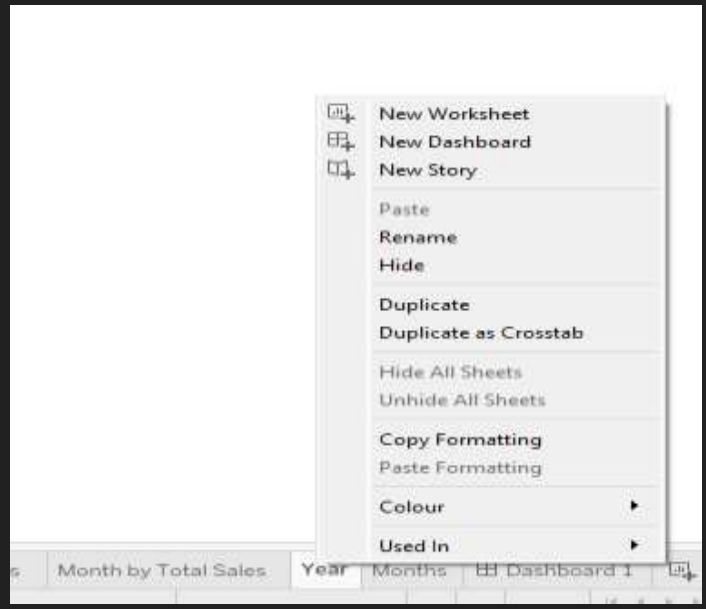
Click on format

Here you can do the necessary changes.

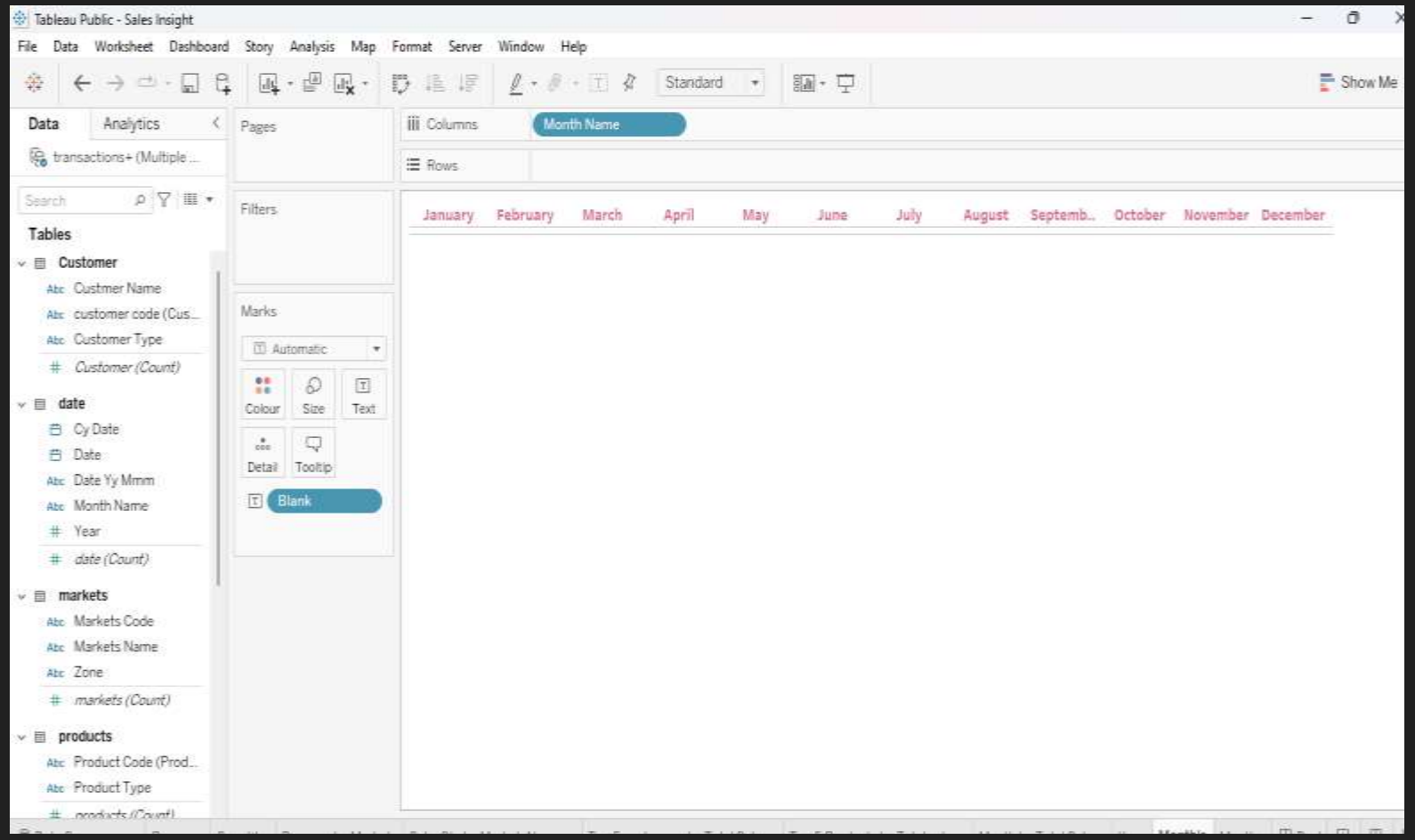
Now for months sheet I need exactly like this so, I will duplicate this sheet.

For duplicating, right click on the year (on the sheet name) you can see Duplicate

Click on Duplicate.



Sheet 9: Months

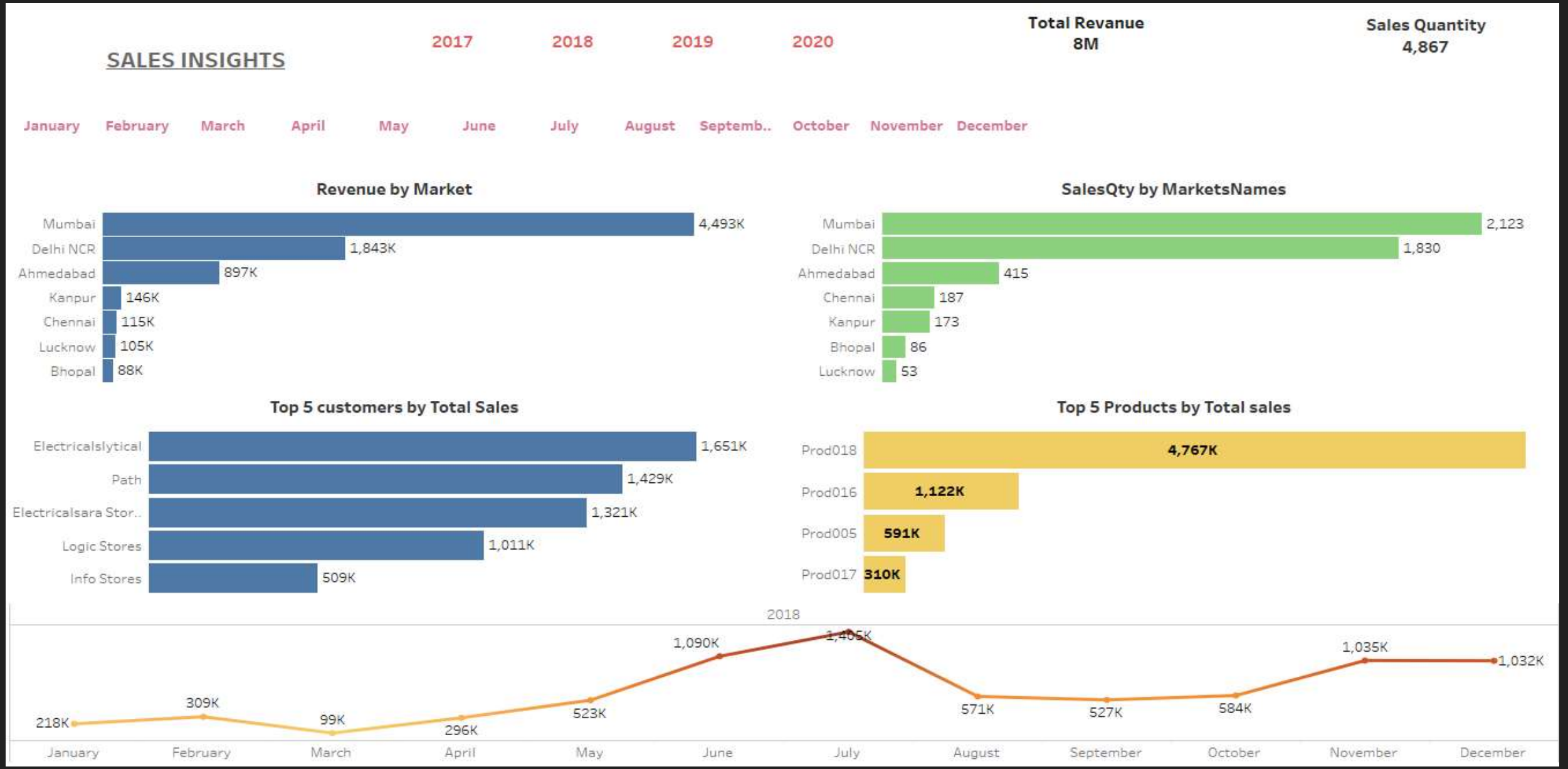


As we duplicated the format will be same but I wanted different colour and font .

Just drag and drop the month names into columns

Till now we have created visualizations , now final step to assemble and create Dashboard.

DASHBOARD


SALES INSIGHTS
2017
2018
2019
2020
Total Revanue
8M
Sales Quantity
4,867
January
February
March
April
May
June
July
August
Septemb..
October
November
December
Revenue by Market
Mumbai 4,493K
Delhi NCR 1,843K
Ahmedabad 897K
Kanpur 146K
Chennai 115K
Lucknow 105K
Bhopal 88K
SalesQty by MarketsNames
Mumbai 2,123
Delhi NCR 1,830
Ahmedabad 415
Chennai 187
Kanpur 173
Bhopal 86
Lucknow 53
Top 5 customers by Total Sales
Electricalslytical 1,651K
Path 1,429K
Electricalsara Stor.. 1,321K
Logic Stores 1,011K
Info Stores 509K
Top 5 Products by Total sales
Prod018 4,767K
Prod016 1,122K
Prod005 591K
Prod017 310K
2018
218K
309K
99K
296K
523K
1,090K
1,405K
571K
527K
584K
1,035K
1,032K
January
February
March
April
May
June
July
August
September
October
November
December

Thank You

Happy Learning