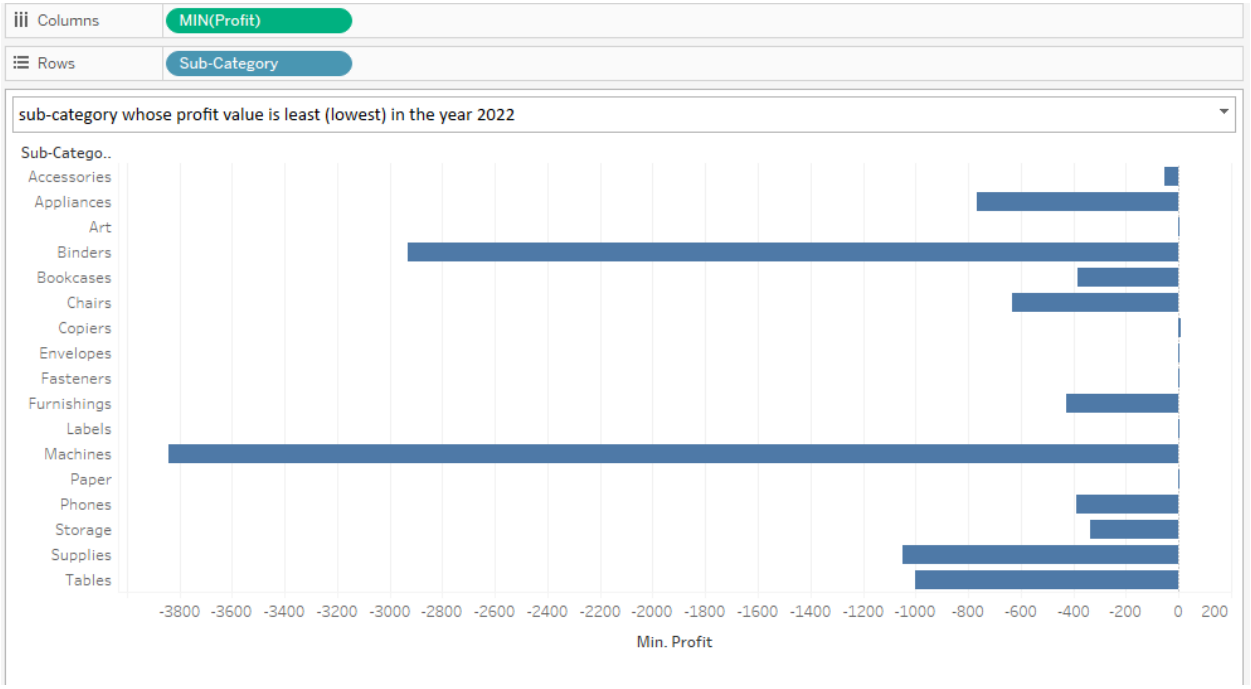
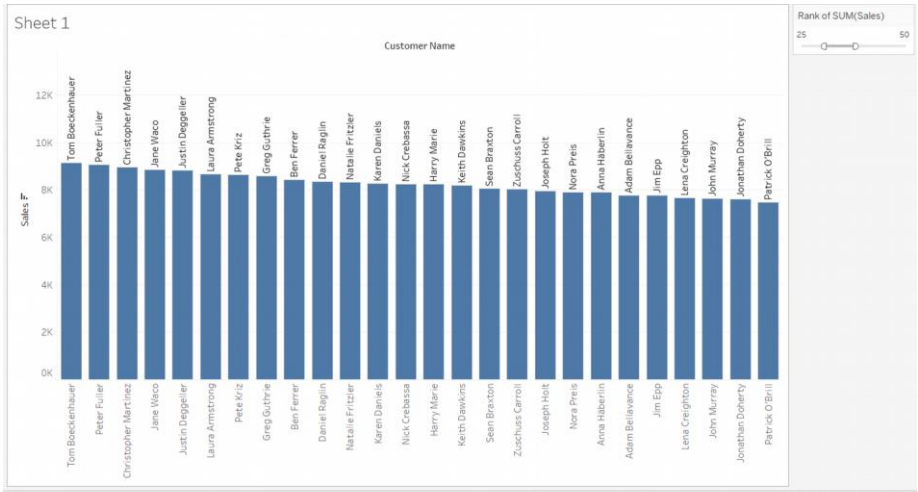
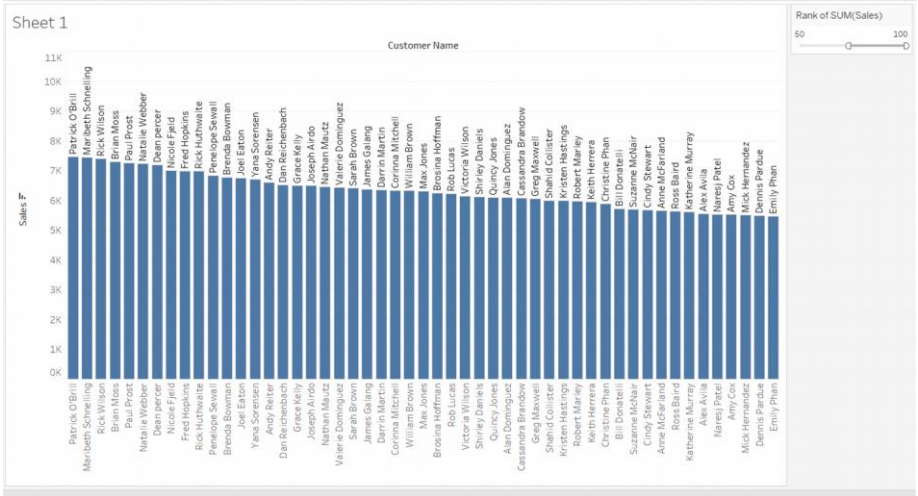
1) Name the sub-category whose profit value is least (lowest) in the year 2022

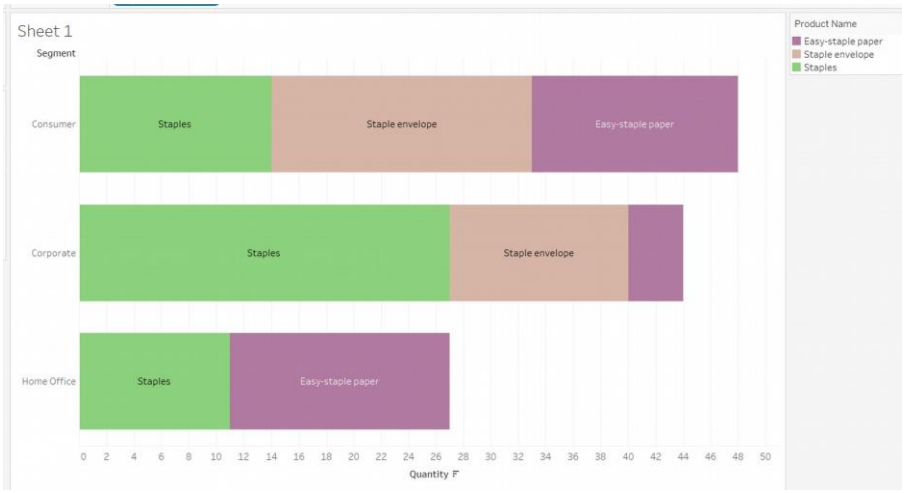


2) Who are 25th, 50th and 100th customers from top with respect to sum of sales in 2021?

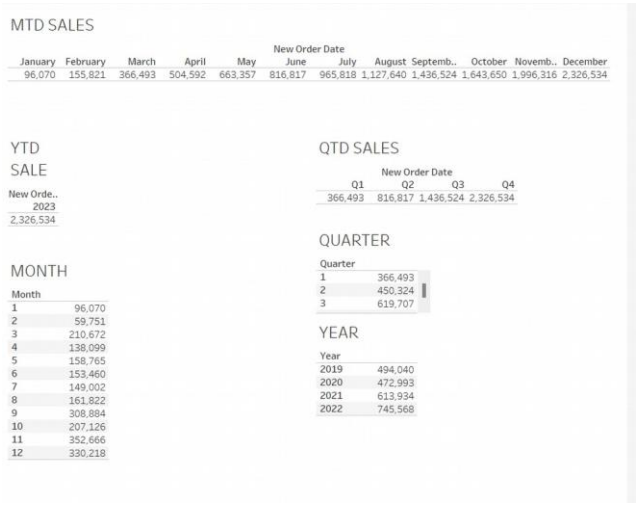




3) Show the Top 3 products with respect to sum of quantity under each segment (Total 9 products) in West region.



4) Create new order date (e.g. if current year is 2023 then make sure new order date should have 2023) and show below columns in the text table.
   - Year
   - Quarter
   - Month
   - SUM(Sales)
   - YTD Sales
   - QTD Sales
   - MTD Sales



MTD SALES

New Order Date											
January	February	March	April	May	June	July	August	Septemb..	October	Novemb..	December
96,070	155,821	366,493	504,592	663,357	816,817	965,818	1,127,640	1,436,524	1,643,650	1,996,316	2,326,534

YTD SALE

New Orde..
2023
2,326,534

QTD SALES

New Order Date			
Q1	Q2	Q3	Q4
366,493	816,817	1,436,524	2,326,534

MONTH

Month	
1	96,070
2	59,751
3	210,672
4	138,099
5	158,765
6	153,460
7	149,002
8	161,822
9	308,884
10	207,126
11	352,666
12	330,218

QUARTER

Quarter	
1	366,493
2	450,324
3	619,707

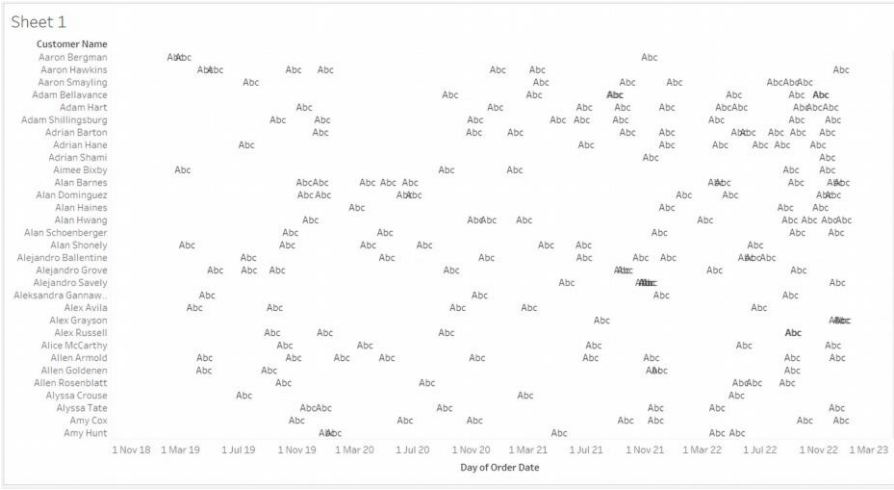
YEAR

Year	
2019	494,040
2020	472,993
2021	613,934
2022	745,568

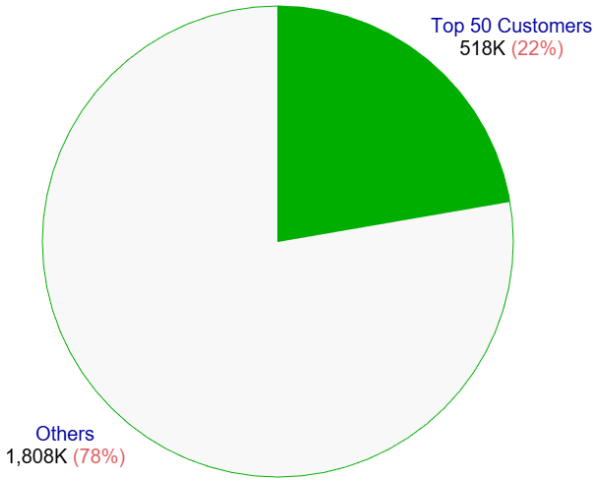
5) Show sub-category and region wise sum of profit in KPI indicator table as shown in below image. Use green circle for positive profit value and red circle for negative profit value.

Sub-Category	Central	East	South	West
Accessories	7,252	11,196	7,005	16,485
Appliances	-2,639	8,565	4,124	8,279
Art	1,195	1,988	1,059	2,411
Binders	-958	12,387	3,901	16,097
Bookcases	-1,998	-1,365	1,339	-1,608
Chairs	6,671	9,753	6,612	4,188
Copiers	15,609	17,499	3,659	19,327
Envelopes	1,778	1,812	1,465	1,933
Fasteners	237	384	174	1,634
Furnishings	-3,916	6,143	3,443	8,221
Labels	1,073	1,156	1,041	2,303
Machines	-1,486	6,929	-1,439	-542
Paper	6,972	9,450	5,947	12,142
Phones	12,323	12,818	10,767	9,142
Storage	1,975	8,391	2,274	8,645
Supplies	-662	-1,137	2	626
Tables	-3,560	11,086	-4,623	1,516

6) Crete a table with customer name, first order date and last order date for each customer.



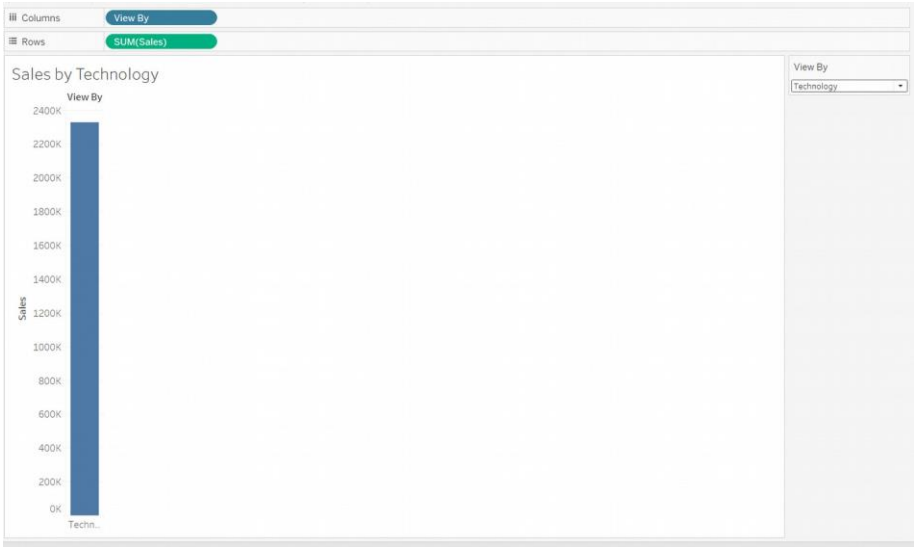
7) Create a pie chart showing Top 50 customers Vs Other customers with respect to sum of sales shown in below image.



8) Create a table with columns such as category, sub-category in rows and region in columns with total sales and total profit shown for each region along with grand total and percent of pane total sorted by sum of sales in descending manner as shown in below image.

		Central		East		South		West	
Category	Sub-Category	Sales (%)	Profit (%)	Sales (%)	Profit (%)	Sales (%)	Profit (%)	Sales (%)	Profit (%)
Furniture	Chairs	52%	-238%	46%	283%	39%	98%	41%	34%
	Tables	24%	127%	19%	-322%	37%	-68%	33%	12%
	Bookcases	15%	71%	21%	-40%	9%	20%	14%	-13%
	Furnishings	9%	140%	15%	178%	15%	51%	12%	67%
	Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Office Supplies	Storage	27%	22%	34%	20%	28%	11%	31%	16%
	Binders	35%	-11%	27%	29%	29%	20%	25%	30%
	Appliances	14%	-29%	16%	20%	16%	21%	13%	15%
	Paper	10%	78%	10%	22%	11%	30%	12%	22%
	Supplies	6%	-7%	5%	-3%	7%	0%	8%	1%
	Art	3%	13%	4%	5%	4%	5%	4%	4%
	Envelopes	3%	20%	2%	4%	3%	7%	2%	4%
	Labels	1%	12%	1%	3%	2%	5%	2%	4%
	Fasteners	0%	3%	1%	1%	0%	1%	3%	3%
	Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Technology	Phones	42%	37%	38%	26%	39%	54%	39%	21%
	Machines	16%	-4%	25%	14%	36%	-7%	17%	-1%
	Accessories	20%	22%	17%	23%	18%	35%	24%	37%
	Copiers	22%	46%	20%	36%	6%	18%	20%	44%
	Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Grand Total		**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

9) Create the parameter with name as View by. Use three values in parameter i.e. Region, Category and Sub-category. If user selects any value then show the sum of sales with respect to the value chosen in parameter as a bar chart. E.g., If user selects category then show category wise sales. Make sure to edit the worksheet title w.r.t. View by value.



10) Show the Top N customers with respect to sum of quantity. The value N should be user-entered. Edit the title accordingly.

11) Answer in brief.

- What is Replace References in tableau?
  Replace References represents a Tableau functionality which lets you replace a current information source using a new one yet maintain the same workbooks and views. It is important when switching to another information source with the same schema however distinct information, or when switching to another database entirely. The Replace References tool replaces every connection to the old data source in your worksheets and displays with references to the recently added data source, saving you from having to manually alter each of them.

- How to handle the NULL values for measures?

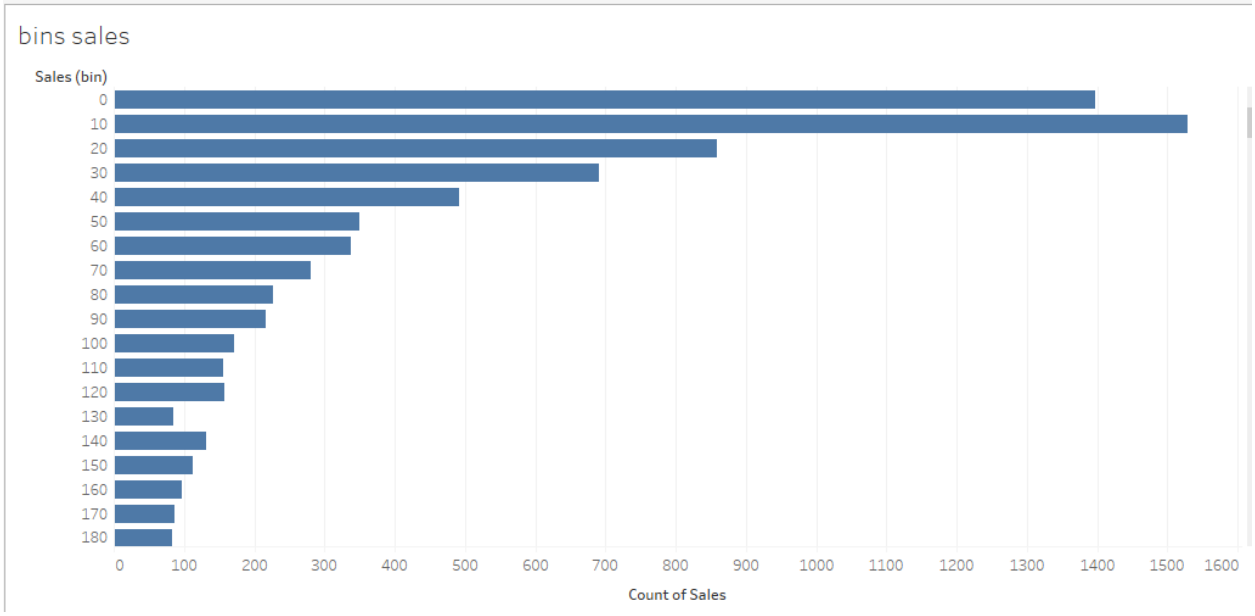
a) Replace Null Values: Users may employ a special value or computation to substitute null values simply right-clicking on a measurement in the window and choosing "Format." From the "Format" popup box, choose the "Special Values" tab then define the value or formula that will be used for the replacement of null values.

b) Remove Null Values: Eliminate any values that are null from the view by clicking on the measurement in the measurement view and choosing "Filter." From the "Filter" dialog box, pick "Null" among the list of variables and press "OK.".

c) Substitute Null Values: One can use the IFNULL() method in a computed field to replace null values using non-null values. For instance, the field that was calculated IFNULL(SUM([Sales]),0) will substitute for the empty values inside the Sales measurement into 0.

d) Use Data Blending: When the main source of data contains values that are null, then may employ data mixing to link it with another source of data that doesn't include null values. Null values can be removed from the main source of data as a result of the merge.

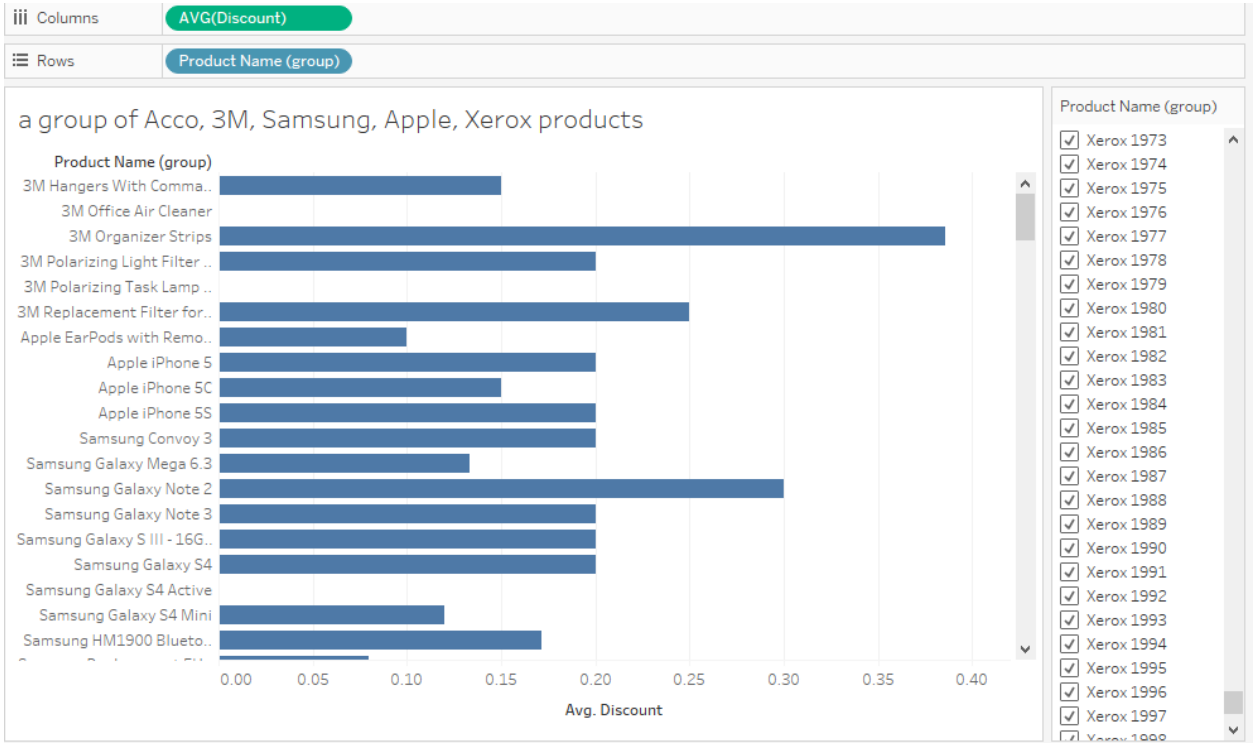
12) Analyse the purchasing capacity of customers by creating the bins of sales with bins size as 10. Show the bar chart of count of sales vs bins. The labels outside the bar chart should be shown in this format: 1,398 *(13.7%)*. Note that if any count of sales value is blank/null value then the bar chart should show 0



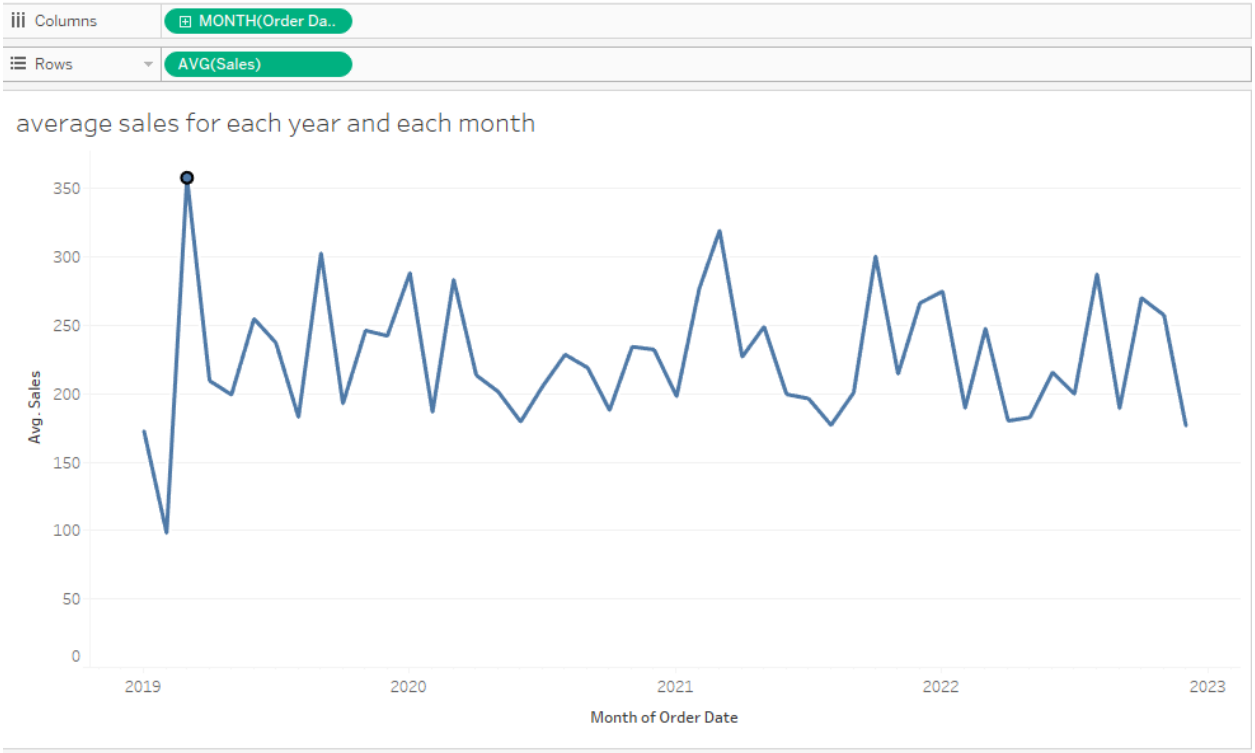
13) Show the country wise, region wise, state wise and city wise sum of sales in a table by creating the hierarchy starting with country. Colour the sum of sales based on following conditions.

- Green: Values > 100000
- Orange: Between 10000 and 100000
- Red: Values < 10000

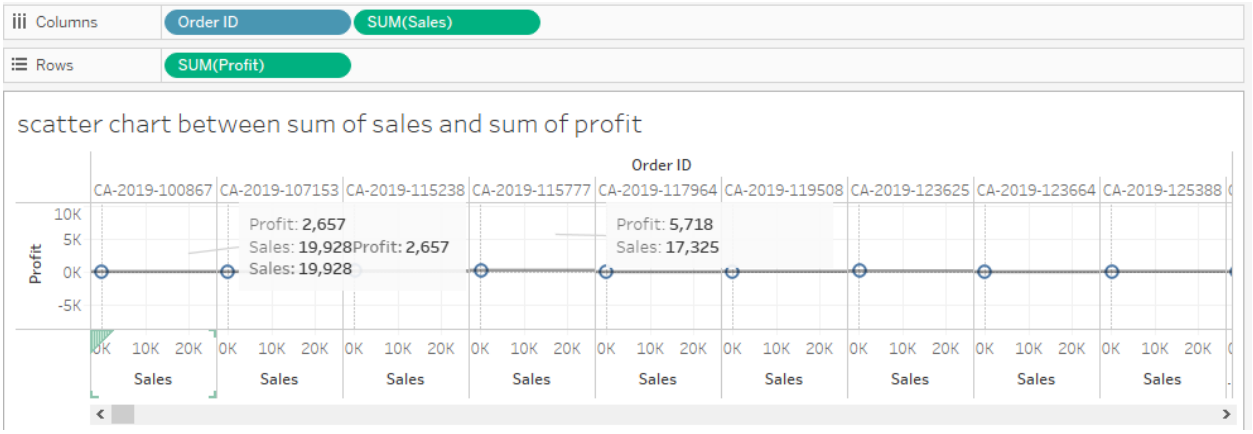
14) Make a group of Acco, 3M, Samsung, Apple, Xerox products. (For remaining products include in others folder). Display each group as average discount percentage.



15) Show the average sales for each year and each month. Show the overall average sales of all the months using reference line and highlight those months for which the sales value is more than overall average sales value.

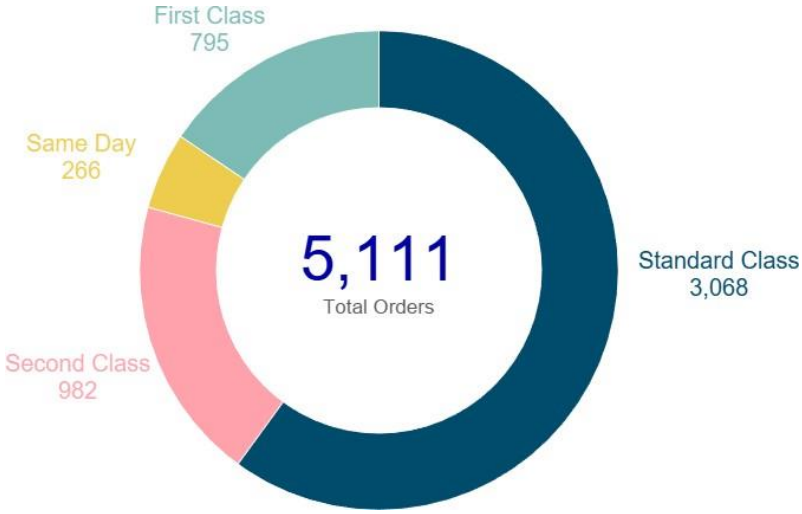


16) Show the scatter chart between sum of sales and sum of profit for all the orders. Show the trend line and write down the observations using Annotate option.



Annotate option are shown above observations.

17) Create a donut chart of orders distribution in different ship modes i.e. Show total unique orders in the inner circle and ship mode wise unique orders in outer circle. Create the donut chart in below fashion with exact formatting.



18) Create a dashboard on Superstore Analytics as shown in below figures. The formatting / labelling / spacing / alignment should be the same as used in the charts. Read this completely.

Notes:

- The worksheet titles, KPI titles represent which dimensions/measures are required in respective places.
- Make sure to use New Order Date in place of existing Order Date dimension for doing any date calculations or adding the Year filter on top.
- Add appropriate tooltips everywhere.
- Add the Year(New Order Date), Region and Category filters on top. All filters must be in multiple values dropdown mode. These filters should be applied to all the worksheets used in dashboard 1 and dashboard 2. Make sure Year filter should not be applied to current year sales, previous year sales and YoY growth % as these values are for current year and previous year. Make sure to apply filters on table in dashboard 2.

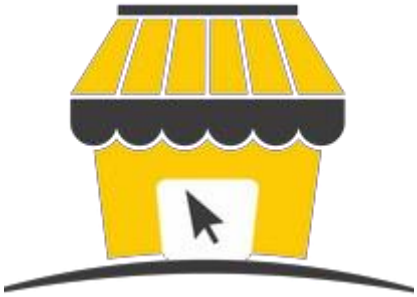
- Initially filters are in hidden state. If you click on show filters icon the filters need to open. When you click on hide filters icon the filters should hide back.

- Apply filter actions keeping bar chart, donut chart and Top 5 bar chart as source and all the worksheets as target.

- Make sure to show top 5 products w.r.t. sum of sales every time irrespective of any filter action values you select or any dropdown filter values you select.
- On the click of Detail Report tab, the dashboard 2 should open and on the click of Sales Analytics tab, dashboard 1 should open. Use appropriate tooltips.

- You can find the dashboard logo and filters logo attached below.

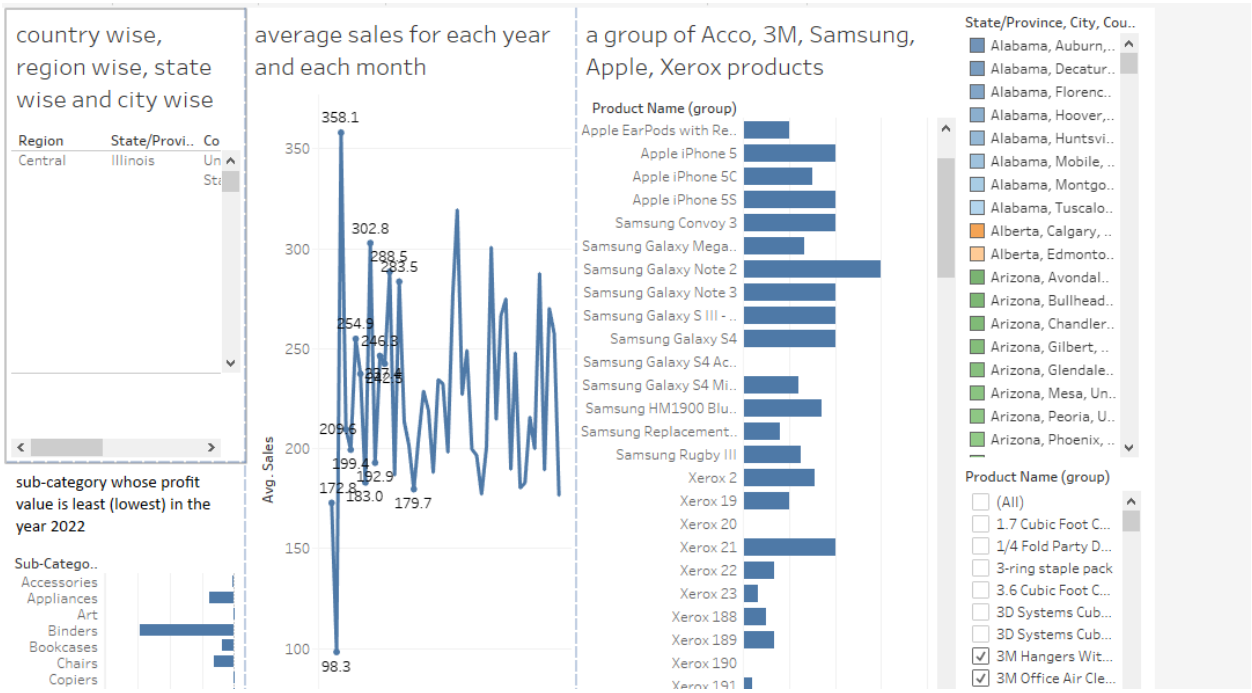
- Dashboard logo:



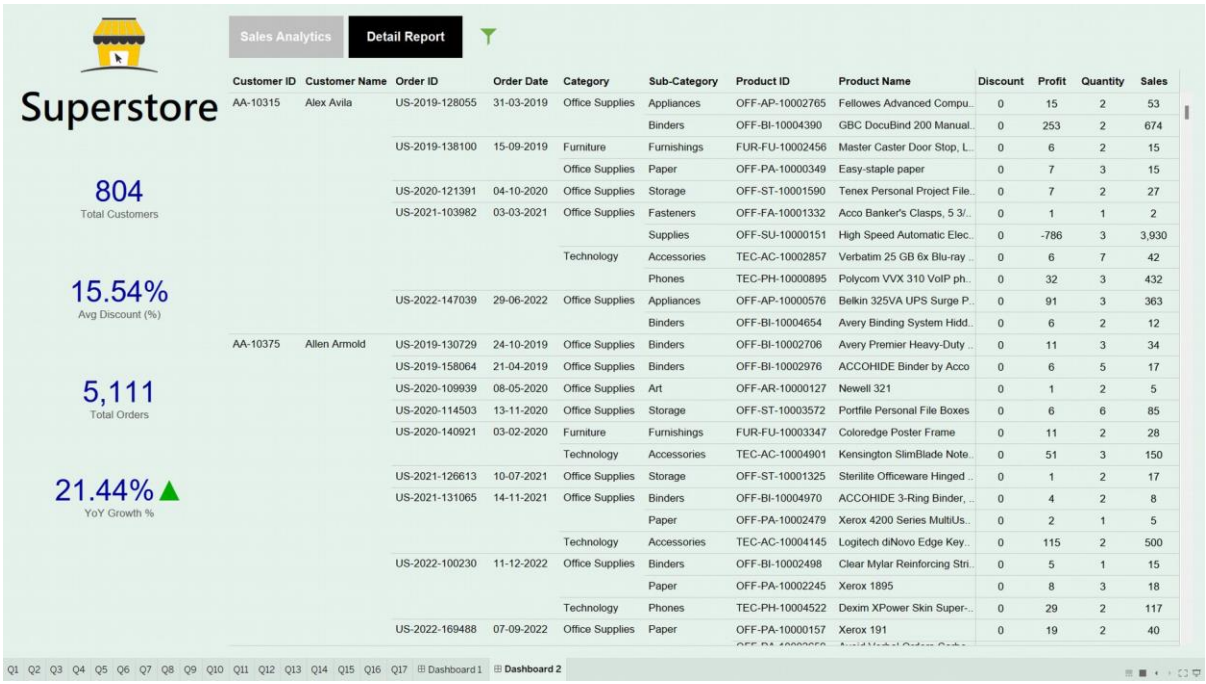
- Show Filters Icon:

- Hide Filt

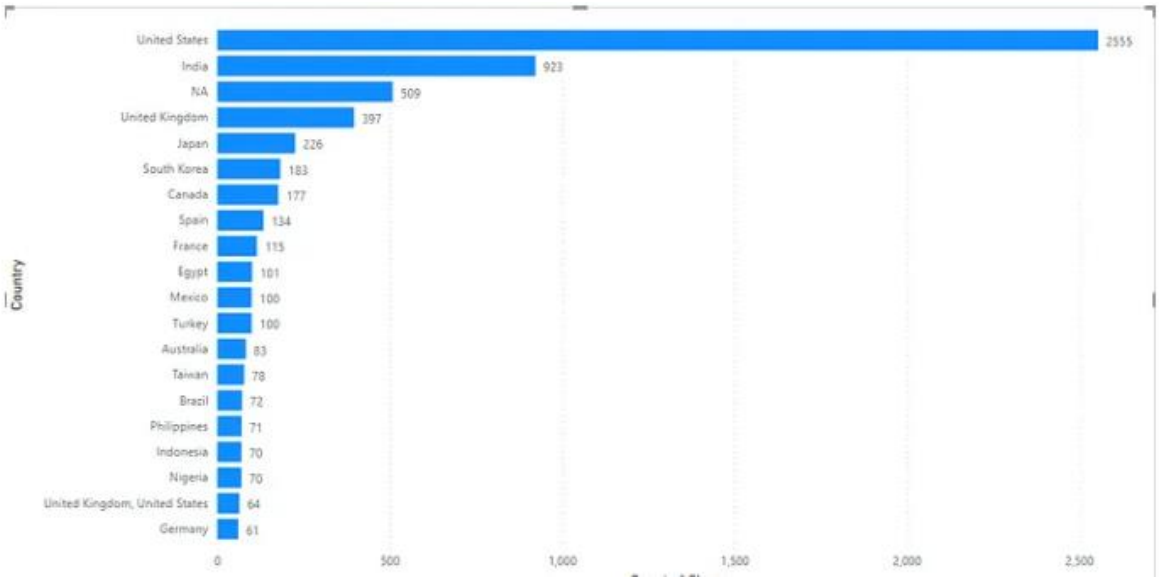
Dashboard 1 (Sales Analytics):

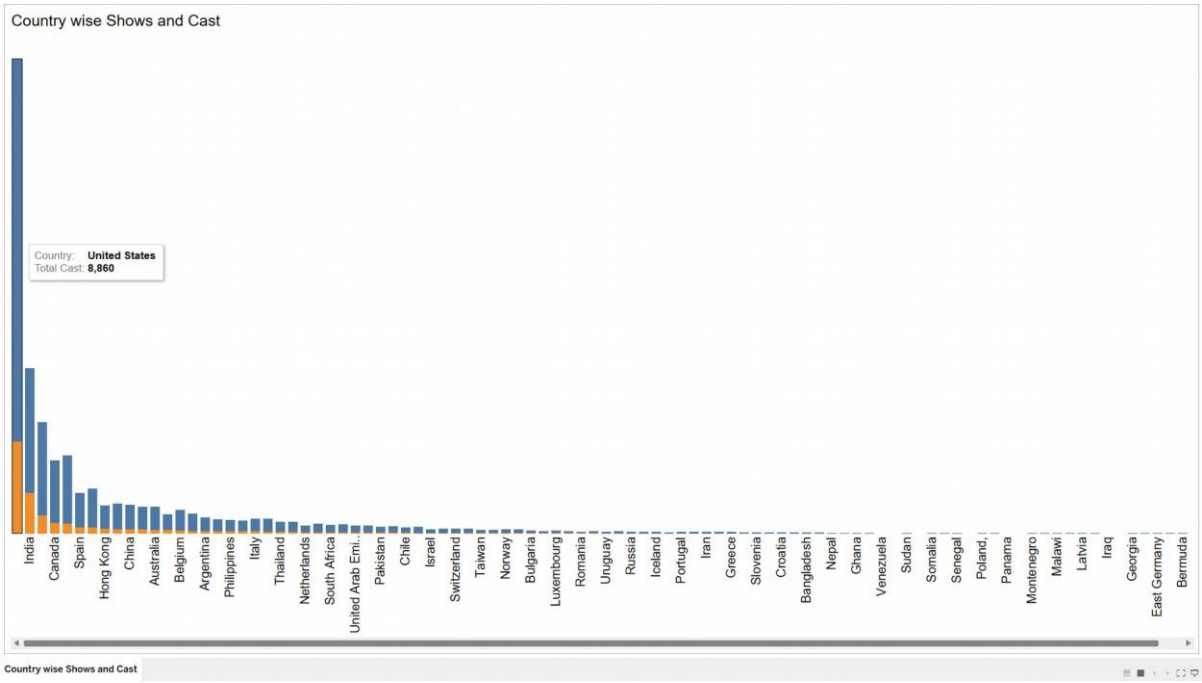


Dashboard 2 (Detail Report):



19) Use Netflix dataset and find out country wise shows and total cost for each country. Show the stacked bar chart for the same as shown in below image.




Country wise Shows and Cast
Country: United States
Total Cast: 8,860
India
Canada
Spain
Hong Kong
China
Australia
Belgium
Argentina
Philippines
Italy
Thailand
Netherlands
South Africa
United Arab Emi...
Pakistan
Chile
Israel
Switzerland
Taiwan
Norway
Bulgaria
Luxembourg
Romania
Uruguay
Russia
Iceland
Portugal
Iran
Greece
Slovenia
Croatia
Bangladesh
Nepal
Ghana
Venezuela
Sudan
Somalia
Senegal
Poland
Panama
Montenegro
Malawi
Latvia
Iraq
Georgia
East Germany
Bermuda
Country wise Shows and Cast