

COMPARISON OF REGION BASED ON SALES BY USING TABLEAU

Creating a Dashboard of Region wise Sales

- Prerequisites
 1. Hierarchy - Represents the level-wise configuration.
 2. Parameters - A variable group have number, date, or string that can replace a constant value in a calculation, filter, or reference line.
 3. Calculated fields - Creates calculated dimensions, such as segments, or new measures, such as ratios, sums, average, minimum, maximum that the user required from the whole dataset.
 4. Dashboard - Displays several views and compares a variety of data simultaneously in easier and presenting manner.

Problem Statement

The director of a leading organization wants to compare the sales between two regions. He has asked each region operators to record the sales data to compare by region. The upper management wants to visualize the sales data using a dashboard to understand the performance between them and suggest the necessary improvements.

STEPS TO PREPARING A REGION WISE SALES DASHBOARD

1. Using Sample Superstore CSV Dataset

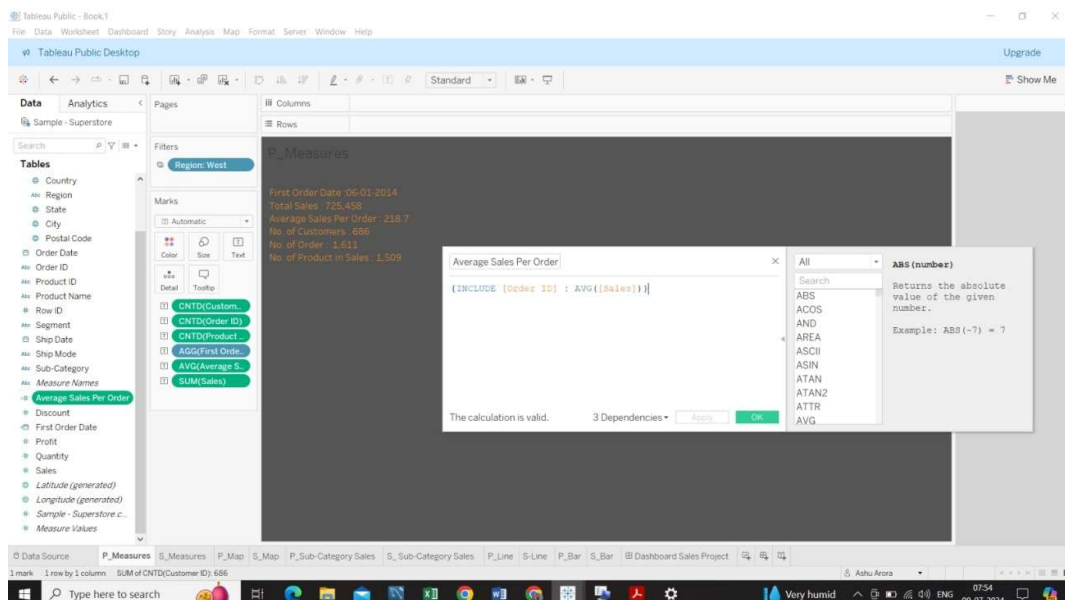
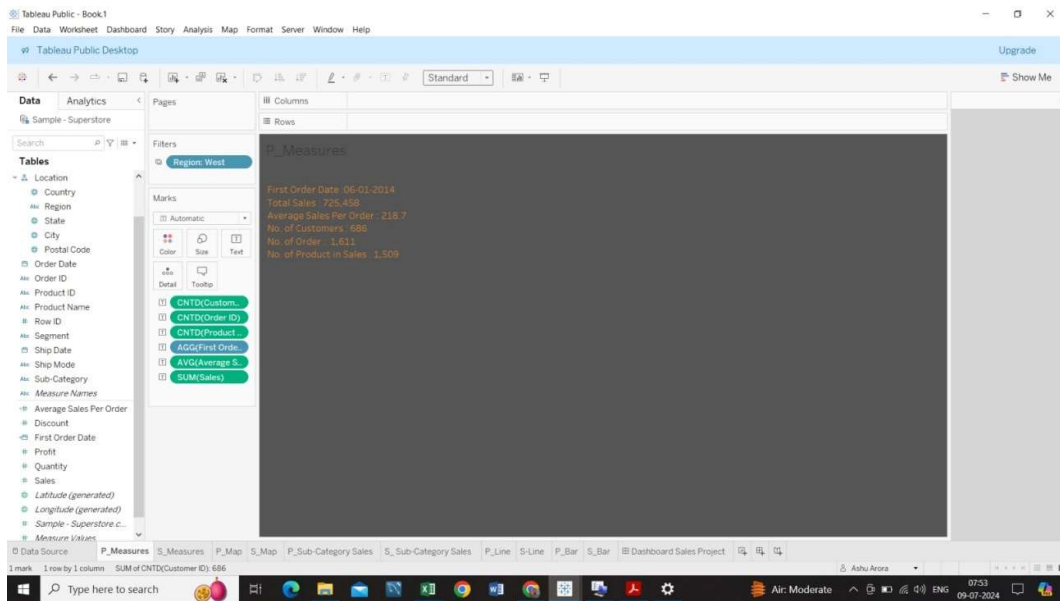
Sample - Superstore.csv - Microsoft Excel																			
Home Insert Page Layout Formulas Data Review View																			
Calibri 11 Wrap Text General Conditional Formatting Styles Cell Styles Insert Delete Format AutoSum Sort & Find & Filter Editing																			
Clipboard Font Alignment Number Styles Cells Editing																			
A1 Row ID																			
Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer	Customer Segment	Country	City	State	Postal Code	Region	Product ID	Category	Sub-Category	Product Name	Sales	Quantity	Discount	Profit
1	CA-2016-1	11-08-16	11-11-16	Second Class	CG-12520	Claire Gut Consumer	United States	Henderson	Kentucky	42420	South	FUR-BO-1	Furniture	Bookcases	Bush Somerset	261.96	2	0	41.91
2	CA-2016-1	11-08-16	11-11-16	Second Class	CG-12520	Claire Gut Consumer	United States	Henderson	Kentucky	42420	South	FUR-CH-1	Furniture	Chairs	Honolulu Delux	731.94	3	0	219.5
3	CA-2016-1	06-12-16	6/16/2016	Second Class	DV-13045	Darrin Van Corporate	United States	Los Angeles	California	90036	West	OFF-LA-1	Office Supp	Labels	Self-Adhe	14.62	2	0	6.8
4	US-2015-1	10-11-15	10/18/2015	Standard	SO-20335	Sean O'Dc Consumer	United States	Fort Laudi	Florida	33311	South	FUR-TA-1	Furniture	Tables	Bretford C	957.5775	5	0.45	-383.0
5	US-2015-1	10-11-15	10/18/2015	Standard	SO-20335	Sean O'Dc Consumer	United States	Fort Laudi	Florida	33311	South	OFF-ST-10	Office Supp	Storage	Eldon Folc	22.368	2	0.2	2.51
6	CA-2014-1	06-09-14	6/14/2014	Standard	BH-11710	Brosina H Consumer	United States	Los Angeles	California	90032	West	FUR-FU-1	Furniture	Furnishing	Eldon Exp	48.86	7	0	14.16
7	CA-2014-1	06-09-14	6/14/2014	Standard	BH-11710	Brosina H Consumer	United States	Los Angeles	California	90032	West	OFF-AR-1	Office Supp	Art	Newell 32	7.28	4	0	1.96
8	CA-2014-1	06-09-14	6/14/2014	Standard	BH-11710	Brosina H Consumer	United States	Los Angeles	California	90032	West	TEC-PH-1	Technolog	Phones	Mitel 532t	907.152	6	0.2	90.71
9	CA-2014-1	06-09-14	6/14/2014	Standard	BH-11710	Brosina H Consumer	United States	Los Angeles	California	90032	West	OFF-BI-10	Office Supp	Binders	DXL Angle	18.504	3	0.2	5.76
10	CA-2014-1	06-09-14	6/14/2014	Standard	BH-11710	Brosina H Consumer	United States	Los Angeles	California	90032	West	OFF-AP-1	Office Supp	Appliance	Belkin FS5	114.9	5	0	34
11	CA-2014-1	06-09-14	6/14/2014	Standard	BH-11710	Brosina H Consumer	United States	Los Angeles	California	90032	West	FUR-TA-1	Furniture	Tables	Chromcraft	1706.184	9	0.2	85.30
12	CA-2014-1	06-09-14	6/14/2014	Standard	BH-11710	Brosina H Consumer	United States	Los Angeles	California	90032	West	TEC-PH-1	Technolog	Phones	Konftel 25	911.424	4	0.2	68.35
13	CA-2017-1	4/15/2017	4/20/2017	Standard	AA-10480	Andrew A Consumer	United States	Concord	North Car	28027	South	OFF-PA-1	Office Supp	Paper	Xerox 196	15.552	3	0.2	5.4
14	CA-2016-1	12-05-16	12-10-16	Standard	IM-15070	Irene Mac Consumer	United States	Seattle	Washingt	98103	West	OFF-BI-10	Office Supp	Binders	Fellowes	407.976	3	0.2	132.55
15	US-2015-1	11/22/2011	11/26/2011	Standard	HP-14815	Harold Pa Home Office	United States	Fort Worth	Texas	76106	Central	OFF-AP-1	Office Supp	Appliance	Holmes Ri	68.81	5	0.8	-123.8
16	US-2015-1	11/22/2011	11/26/2011	Standard	HP-14815	Harold Pa Home Office	United States	Fort Worth	Texas	76106	Central	OFF-BI-10	Office Supp	Binders	Storex Du	2.544	3	0.8	-3.8
17	CA-2014-1	11-11-14	11/18/2014	Standard	PK-19075	Pete Kriz Consumer	United States	Madison	Wisconsin	53711	Central	OFF-ST-10	Office Supp	Storage	Stur-D-Stc	665.88	6	0	13.31
18	CA-2014-1	15/13/2014	5/15/2014	Second Class	AG-10270	Alejandro Consumer	United States	West Jord	Utah	84084	West	OFF-ST-10	Office Supp	Storage	Fellowes	55.5	2	0	9
19	CA-2014-1	18/27/2014	09-01-14	Second Class	ZD-21925	Zuschuss Consumer	United States	San Franci	California	94109	West	OFF-AR-1	Office Supp	Art	Newell 34	8.56	2	0	2.46
20	CA-2014-1	18/27/2014	09-01-14	Second Class	ZD-21925	Zuschuss Consumer	United States	San Franci	California	94109	West	TEC-PH-1	Technolog	Phones	Cisco SPA	213.48	3	0.2	16.0
21	CA-2014-1	18/27/2014	09-01-14	Second Class	ZD-21925	Zuschuss Consumer	United States	San Franci	California	94109	West	OFF-BI-10	Office Supp	Binders	Wilson Jon	22.72	4	0.2	7.3
22	CA-2016-1	12-09-16	12/13/2016	Standard	KB-16585	Ken Black Corporate	United States	Fremont	Nebraska	68025	Central	OFF-AR-1	Office Supp	Art	Newell 31	19.46	7	0	5.05
23	CA-2016-1	12-09-16	12/13/2016	Standard	KB-16585	Ken Black Corporate	United States	Fremont	Nebraska	68025	Central	OFF-AP-1	Office Supp	Appliance	Acco Six-C	60.34	7	0	15.66

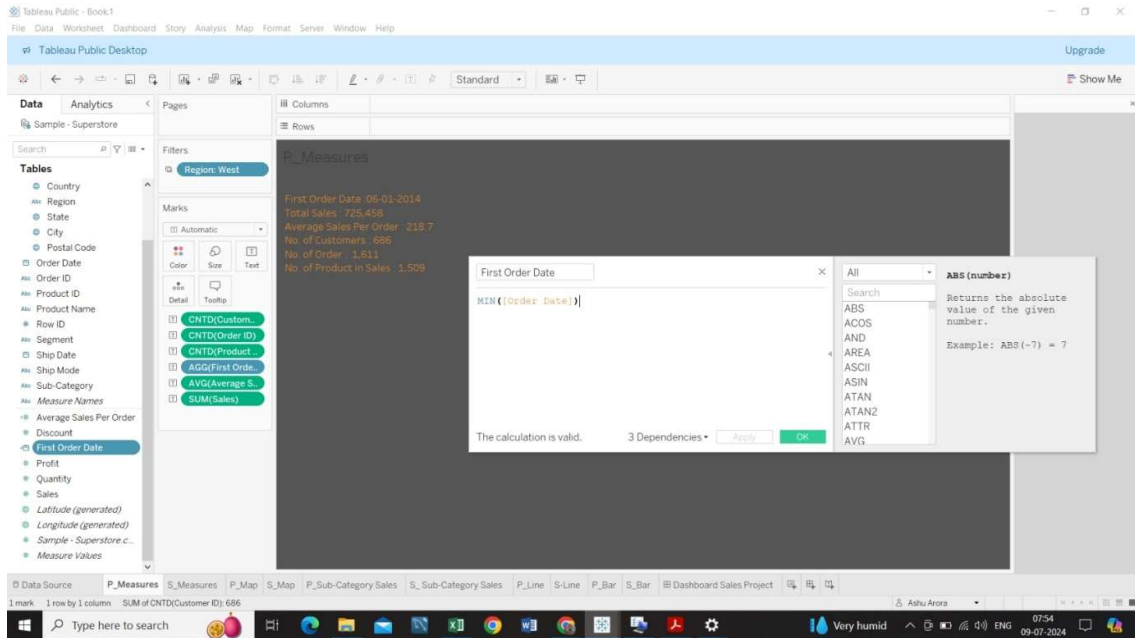
2. Importing Same Data CSV File in Tableau

Order ID	Order Date	Ship Date	Ship Mode	Customer ID	Customer Name	Segment	Country
1	CA-2016-152156	08-11-2016	11-11-2016	Second Class	CG-12520	Claire Gulte	Consumer
2	CA-2016-152156	08-11-2016	11-11-2016	Second Class	CG-12520	Claire Gulte	Consumer
3	CA-2016-138688	12-06-2016	16-06-2016	Second Class	DV-13045	Darrin Van Huff	Corporate
4	US-2015-108966	11-10-2015	18-10-2015	Standard Class	SO-20335	Sean O'Donnell	Consumer
5	US-2015-108966	11-10-2015	18-10-2015	Standard Class	SO-20335	Sean O'Donnell	Consumer
6	CA-2014-115812	09-06-2014	14-06-2014	Standard Class	BH-11710	Brosina Hoffman	Consumer
7	CA-2014-115812	09-06-2014	14-06-2014	Standard Class	BH-11710	Brosina Hoffman	Consumer
8	CA-2014-115812	09-06-2014	14-06-2014	Standard Class	BH-11710	Brosina Hoffman	Consumer
9	CA-2014-115812	09-06-2014	14-06-2014	Standard Class	BH-11710	Brosina Hoffman	Consumer
10	CA-2014-115812	09-06-2014	14-06-2014	Standard Class	BH-11710	Brosina Hoffman	Consumer
11	CA-2014-115812	09-06-2014	14-06-2014	Standard Class	BH-11710	Brosina Hoffman	Consumer
12	CA-2014-115812	09-06-2014	14-06-2014	Standard Class	BH-11710	Brosina Hoffman	Consumer

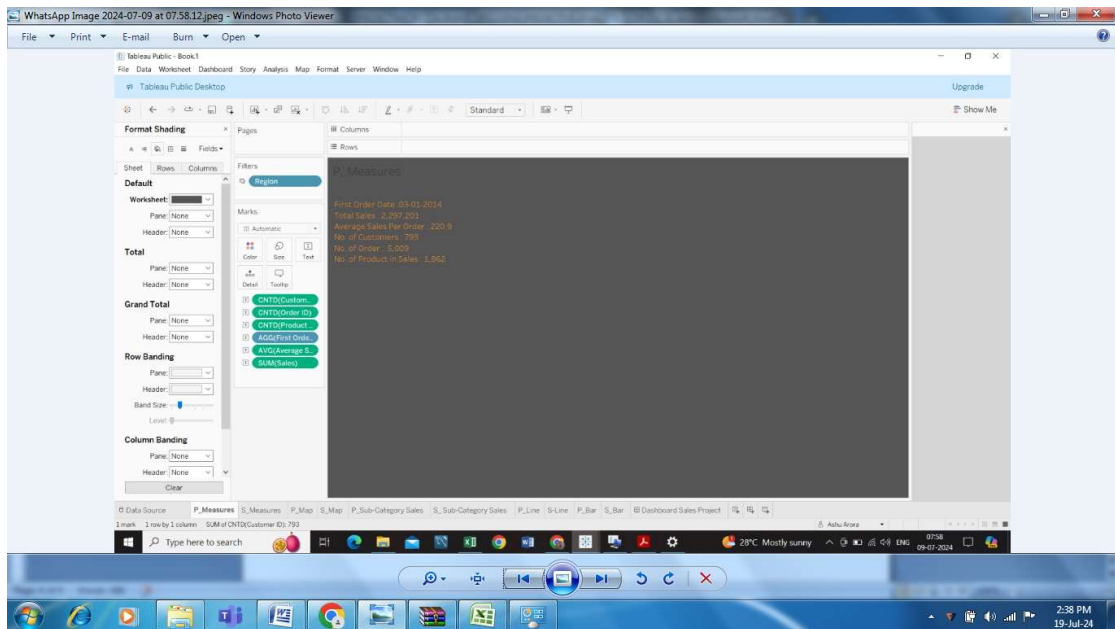
3. Created two measures Primary measure (sheet named as P_Measures) & Secondary Measures (sheet named as S_Measures)

- P_Measures consists following by using calculated fields, show in the upper dropdown on top of the measures & dimensions for the region West :-
 - a. First order Date
 - b. Total Sales
 - c. Average Sales Per Order
 - d. No. of Customers
 - e. No. of Order
 - f. No. of Product in Sales

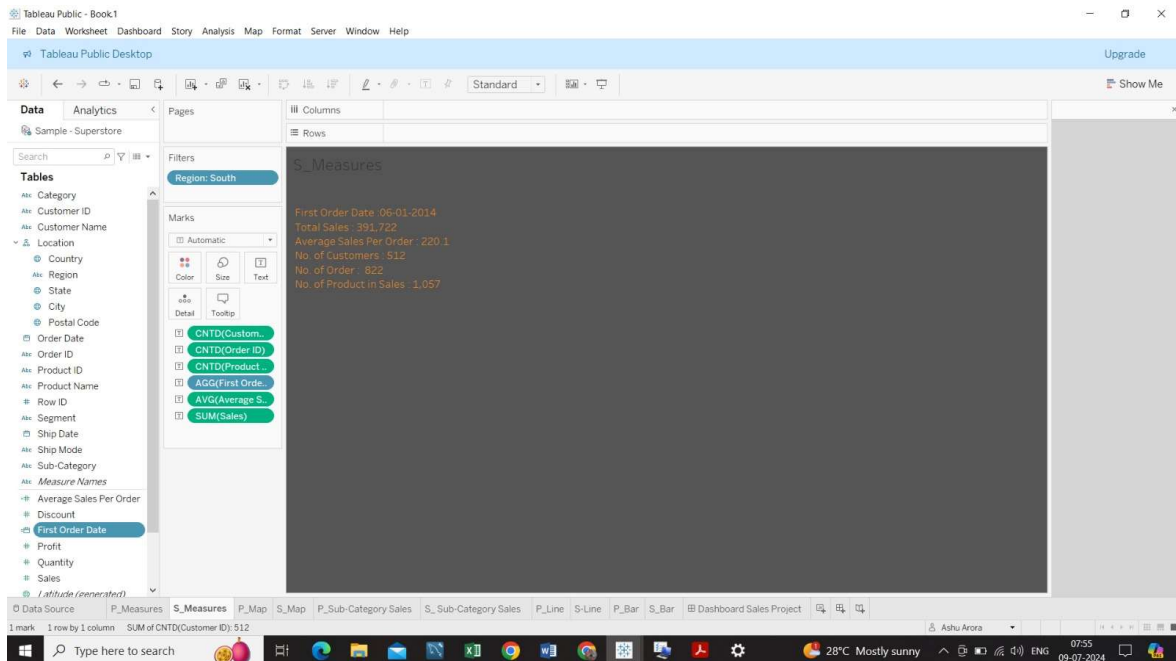




- To format Measures & Dimensions in the P_Measures, use Format Tab on the top Ribbon Bar

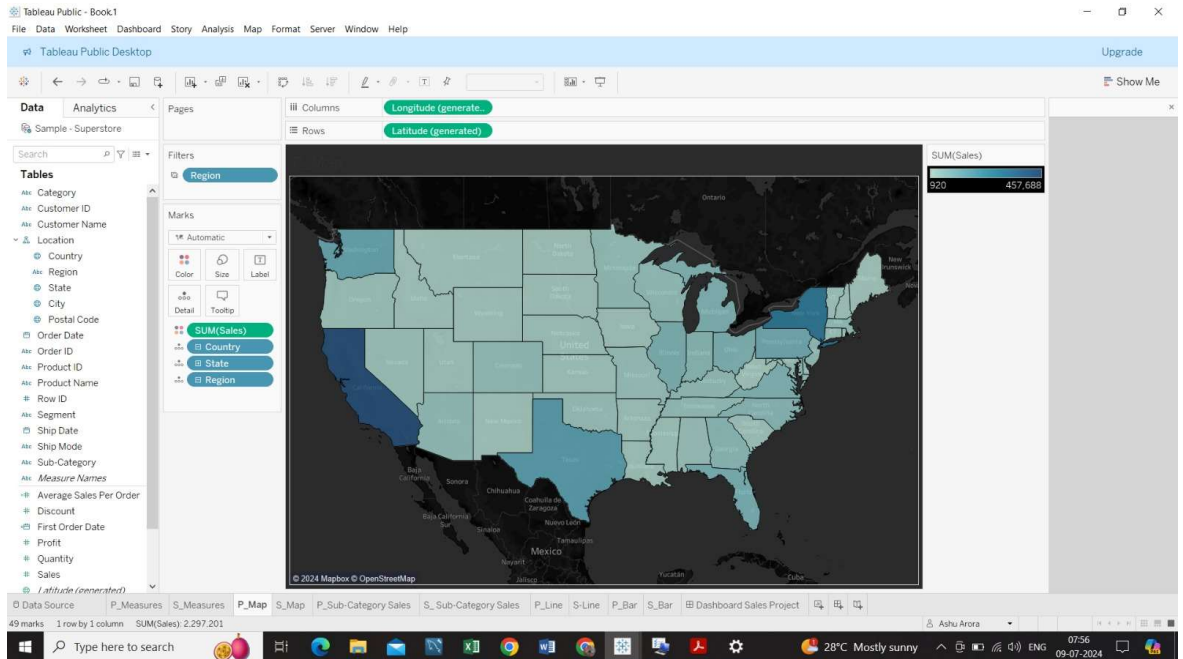


- S_Measures consists following by using calculated fields, show in the upper dropdown on top of the measures & dimensions for the region South :-
 - g. First order Date
 - h. Total Sales
 - i. Average Sales Per Order
 - j. No. of Customers
 - k. No. of Order
 - l. No. of Product in Sales

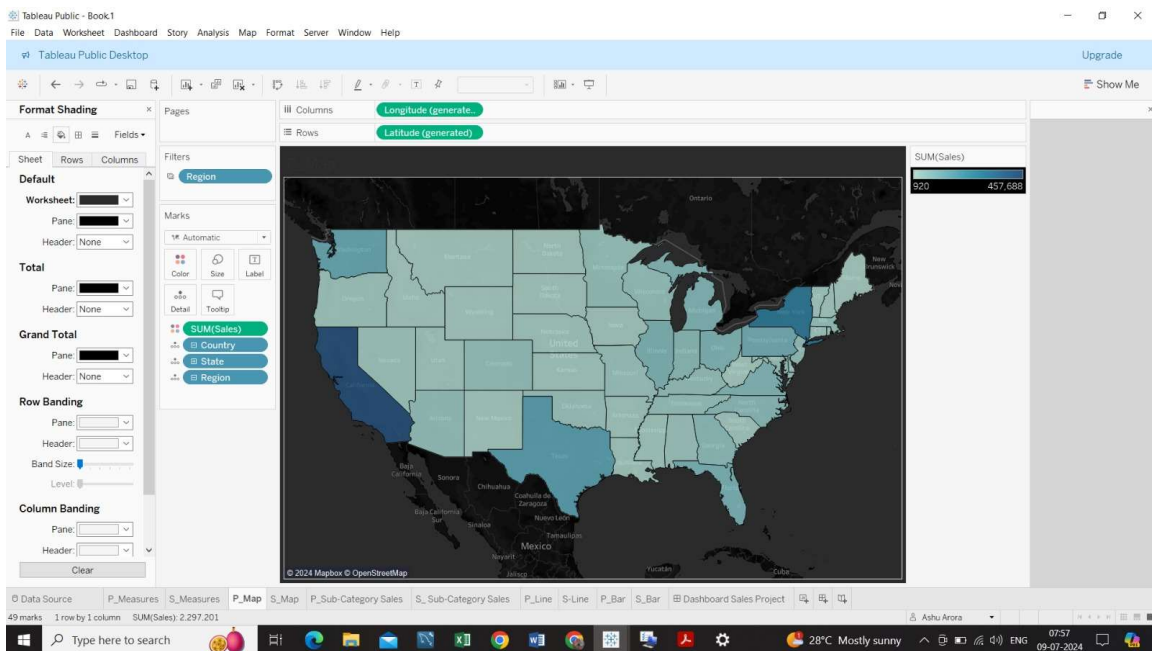


4. Created two sheets P_Map & S_Map refer to Primary Map for Various Regions & Secondary Maps for the Various Region respectively.

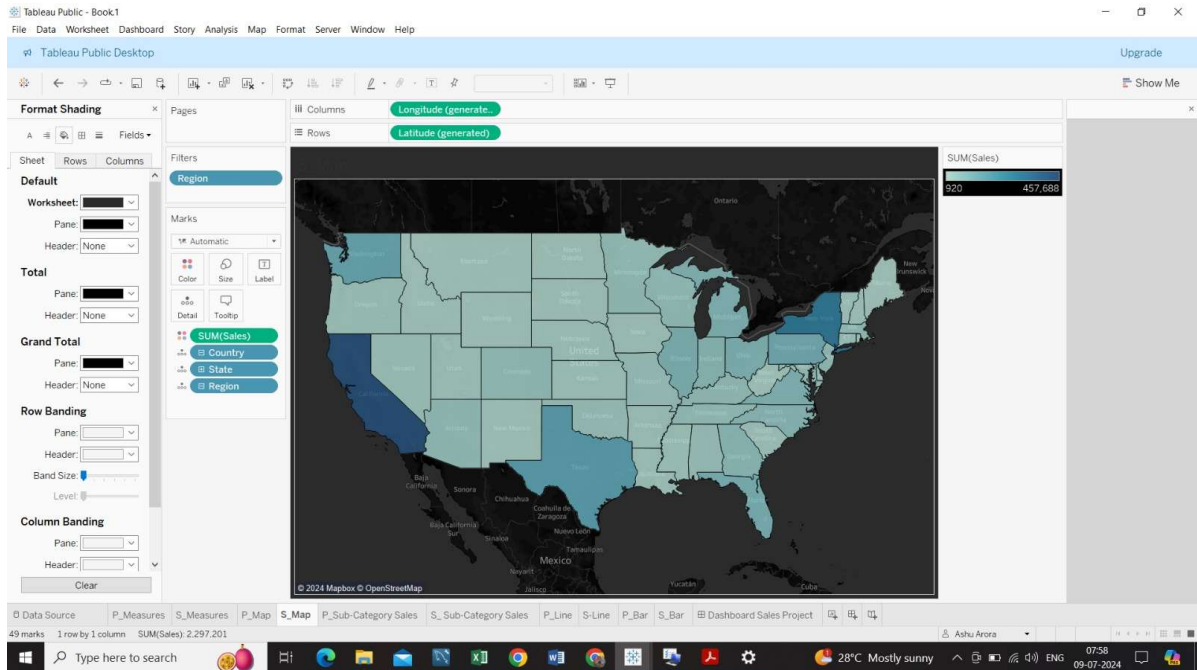
- P_Map created by using following Measures & Dimensions :
 - i. Measures : Sum of Sales
 - ii. Dimensions : Country, State & region



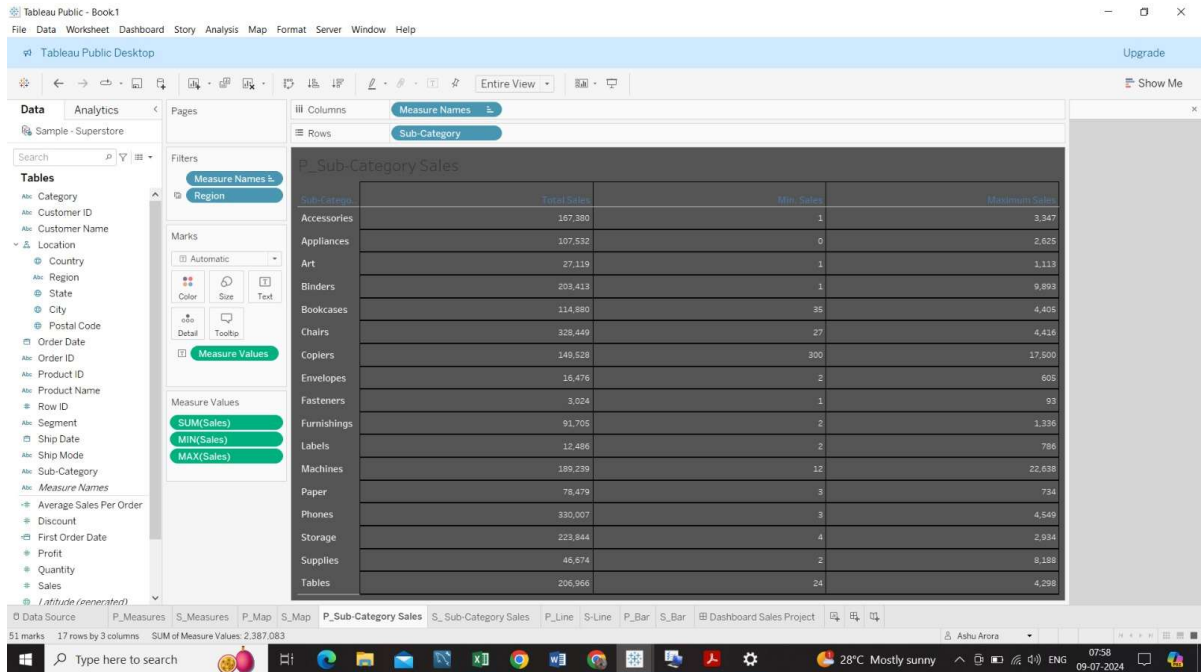
- To format Map Background, title etc. in the P_Map, use Format Tab on the top of the Ribbon Bar



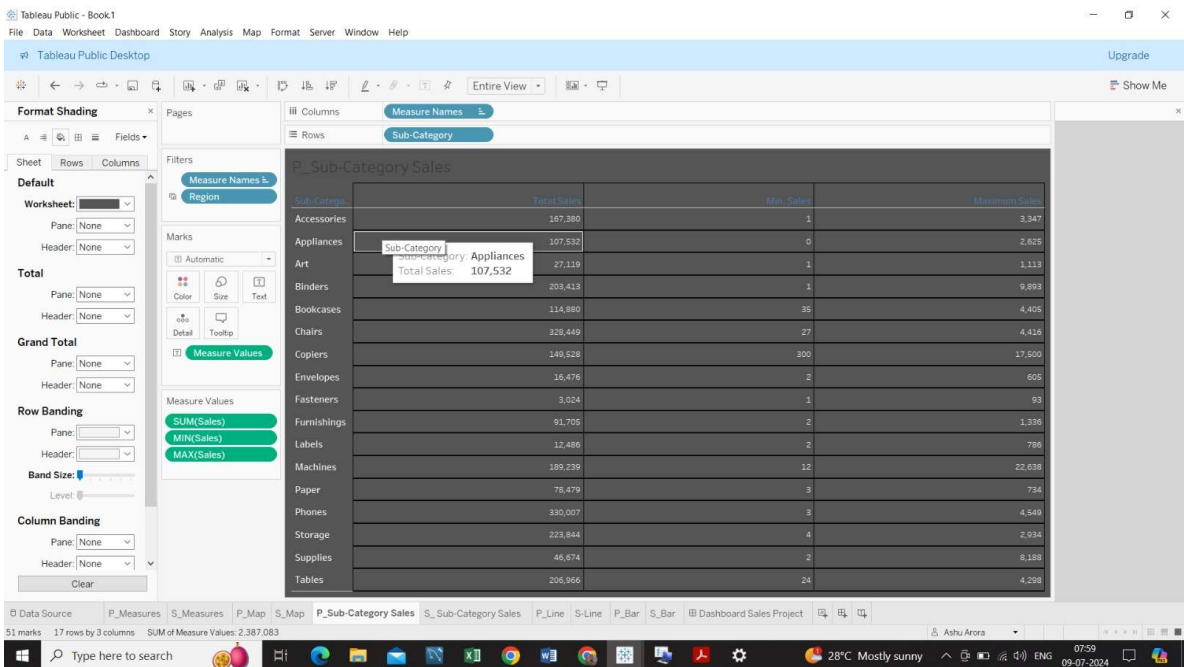
- S_Map created by using following Measures & Dimensions :
 - i. Measures : Sum of Sales
 - ii. Dimensions : Country, State & region
- To format Map Background, title etc. in the S_Map, use Format Tab on the top of the Ribbon Bar



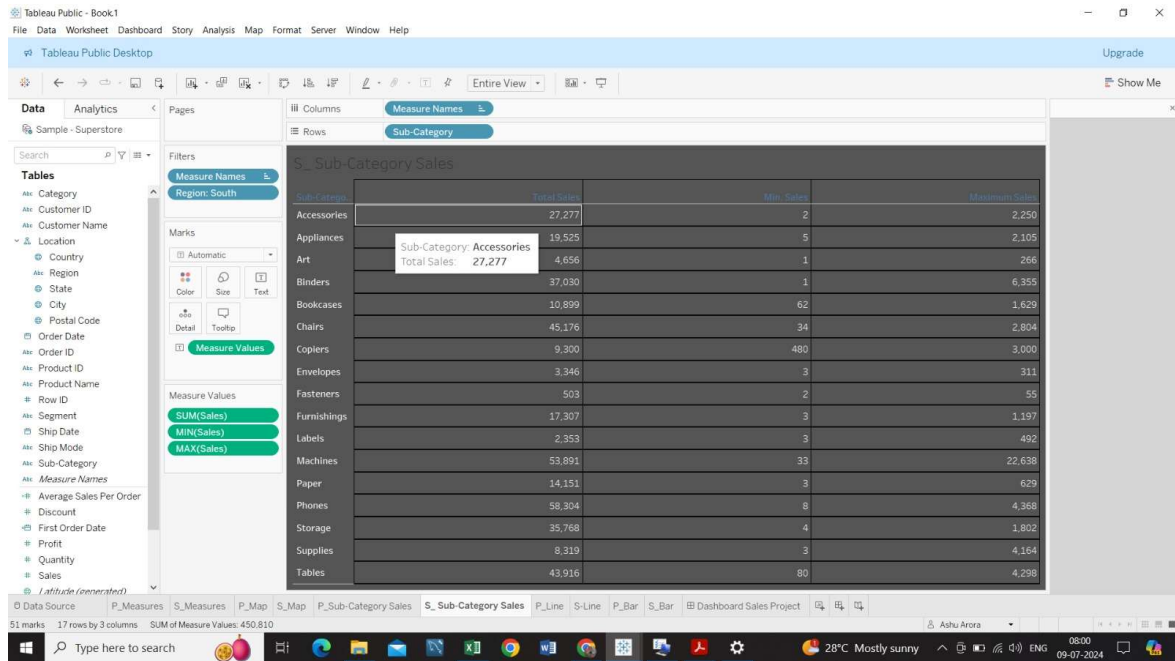
5. Created P_Sub_Category_Sales Sheet refers to the sales based on Sub Category at each region. This again showing the Total Sales, Minimum Sales & Maximum Sales for each sub category region wise. Where measures are : Sum of sales, by using aggregate function we have used minimum sales & maximum sales for the dimension sub-category region wise.



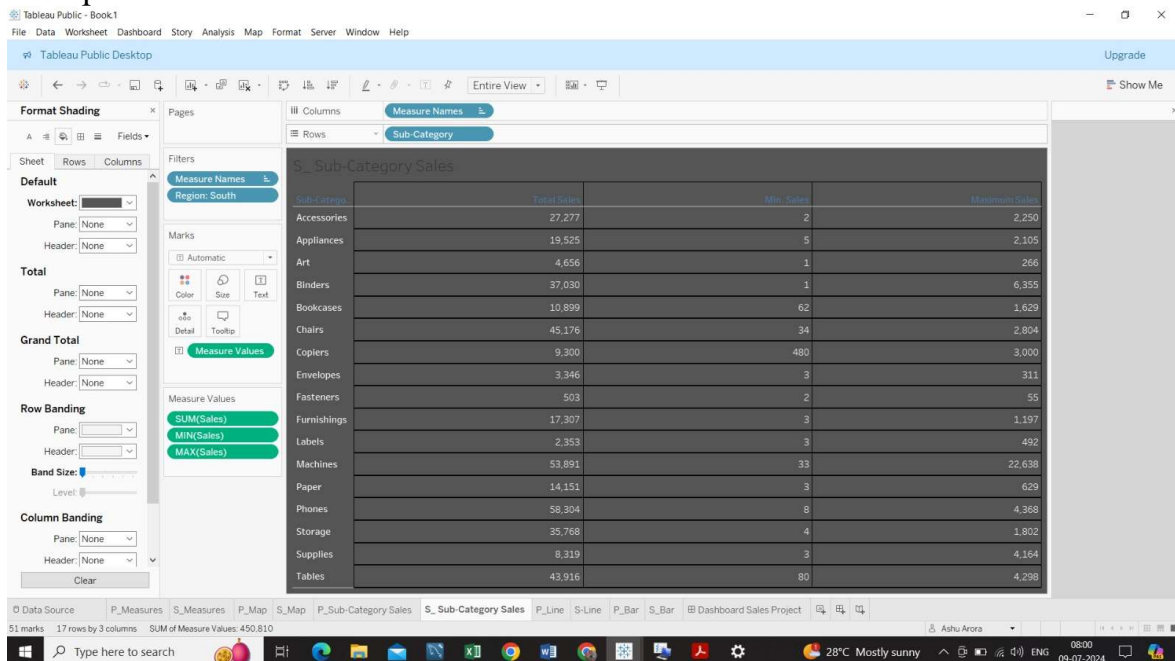
- To format Measures & Dimensions in the P_Sub_Category, use Format Tab on the top Ribbon Bar



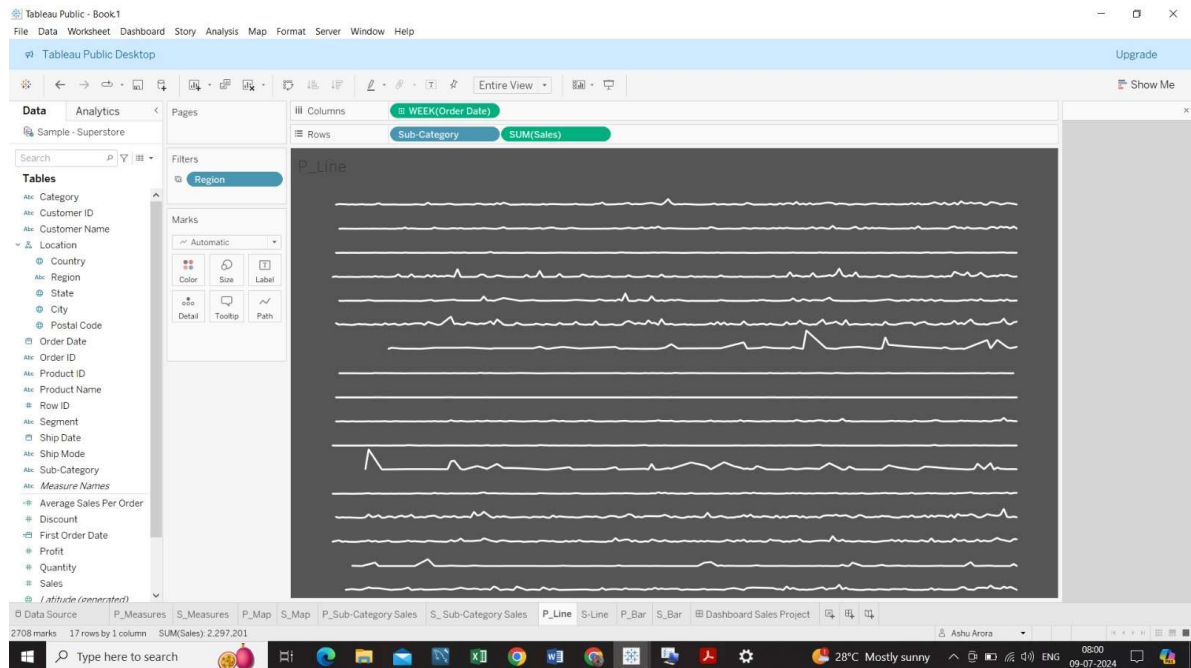
- Created S_Sub_Category_Sales Sheet refers to the sales based on Sub Category at each region. This again showing the Total Sales, Minimum Sales & Maximum Sales for each sub category region wise. Where measures are : Sum of sales, by using aggregate function we have used minimum sales & maximum sales for the dimension sub-category region wise.



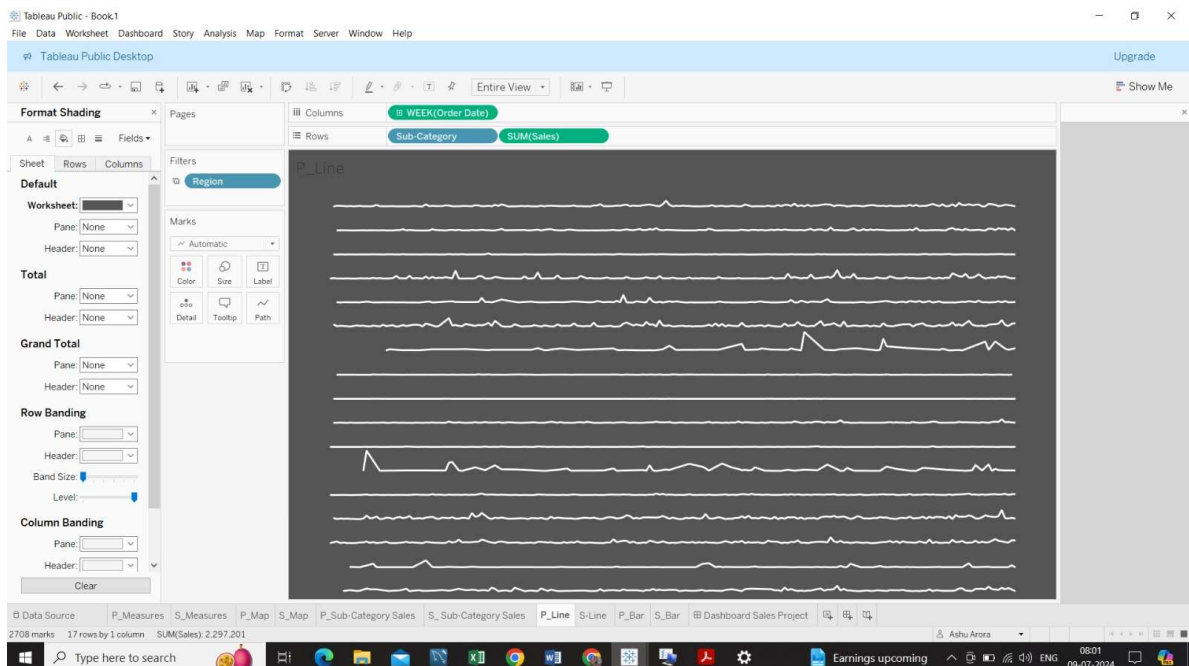
- To format Measures & Dimensions in the S_Sub_Category, use Format Tab on the top Ribbon Bar



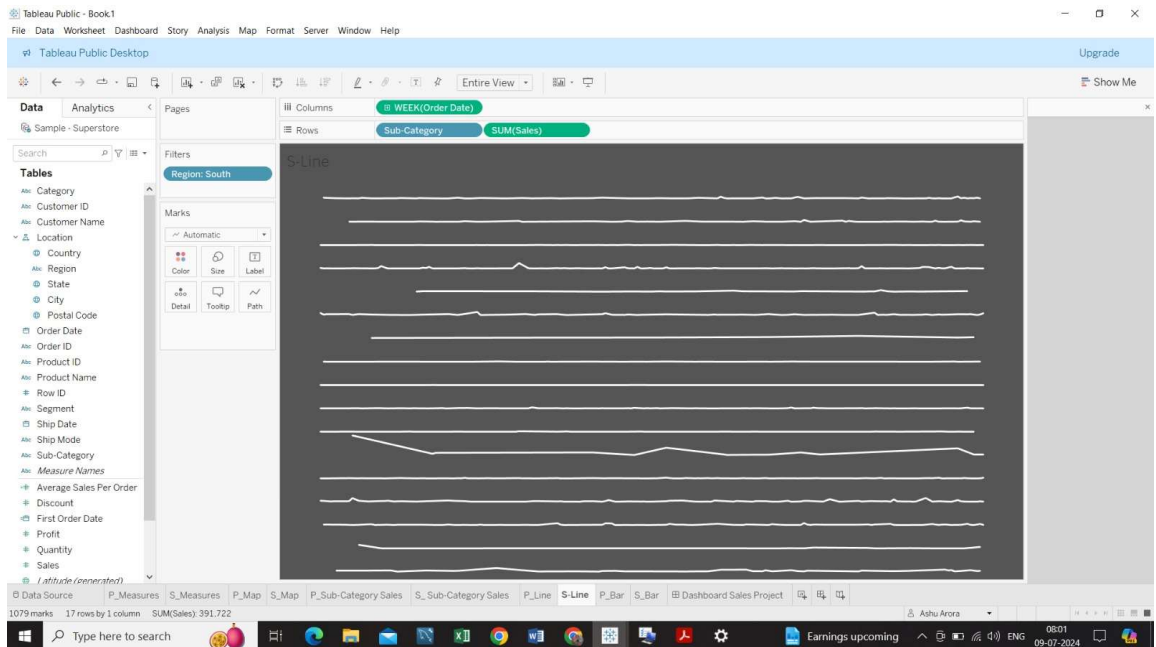
- Created P_Line Sheet refers to the Primary Line sheet. Here data is based on the sales based on date wise order of Sub Category based on each region. Here the segment is showing based on the week.



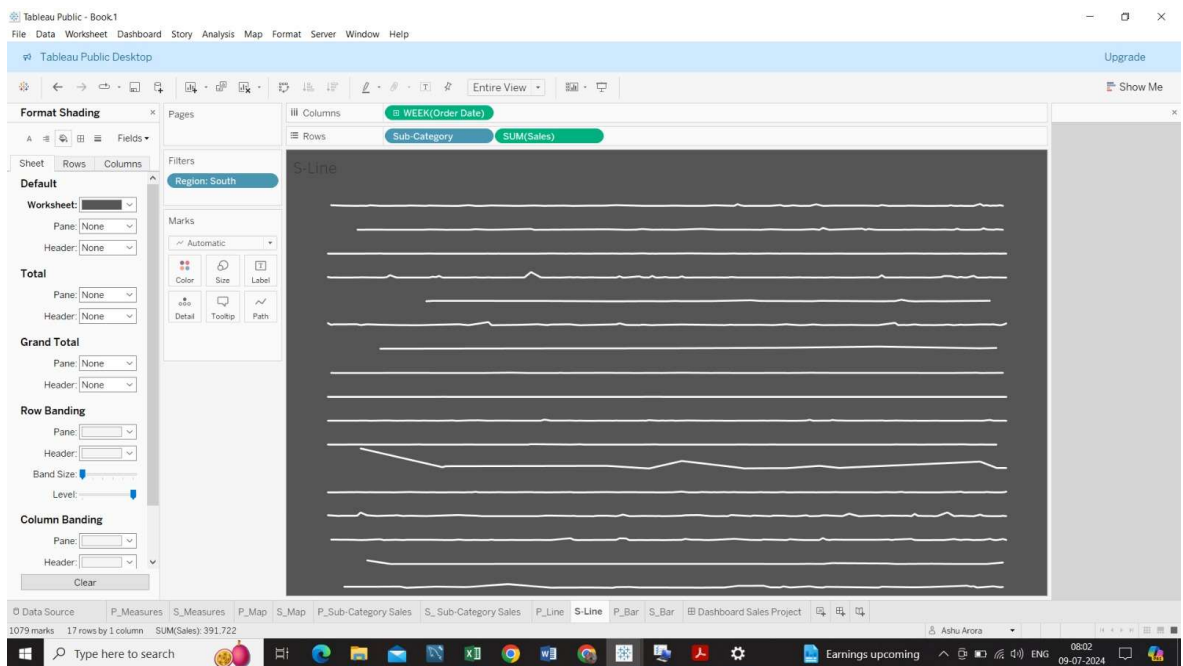
- To format Measures & Dimensions in the P_Line, use Format Tab on the top Ribbon Bar.



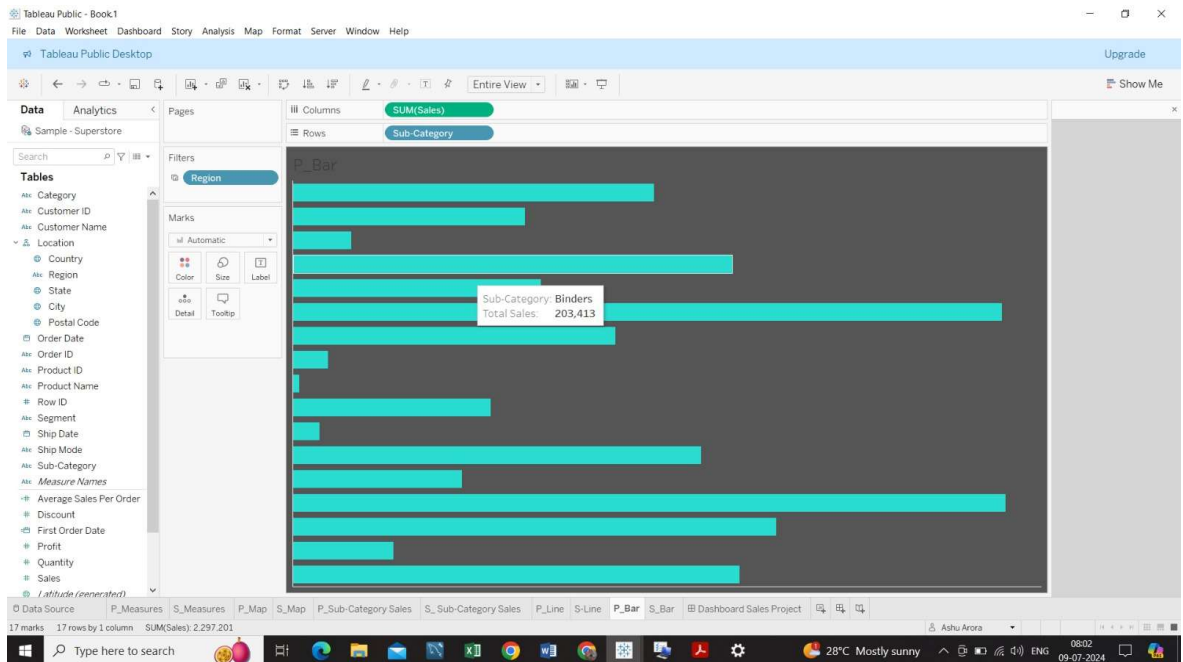
8. Created S_Line Sheet refers to the Secondary Line sheet. Here data is based on the sales based on date wise order of Sub Category based on each region. Here the segment is showing based on the week.



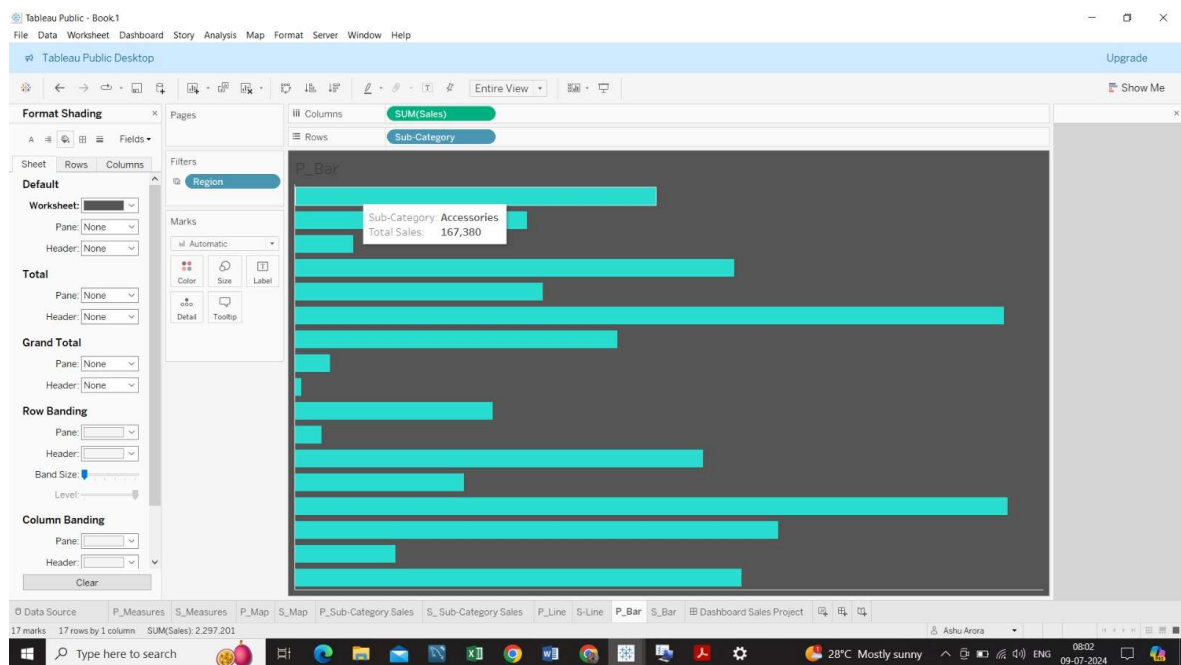
- To format Measures & Dimensions, Axis & Background etc. line in the S_Line, use Format Tab on the top of the Ribbon Bar.



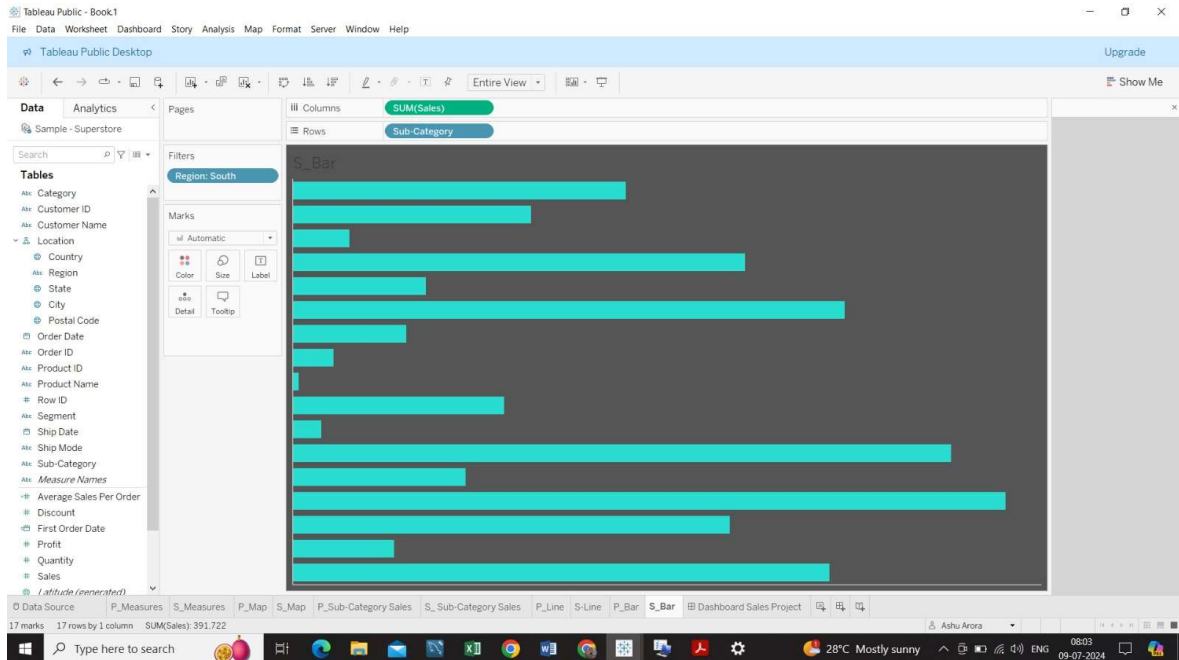
9. Created P_Bar Sheet refers to the Primary Line sheet. Here data is shown in Bar Chart of sum of total sales of each sub category.



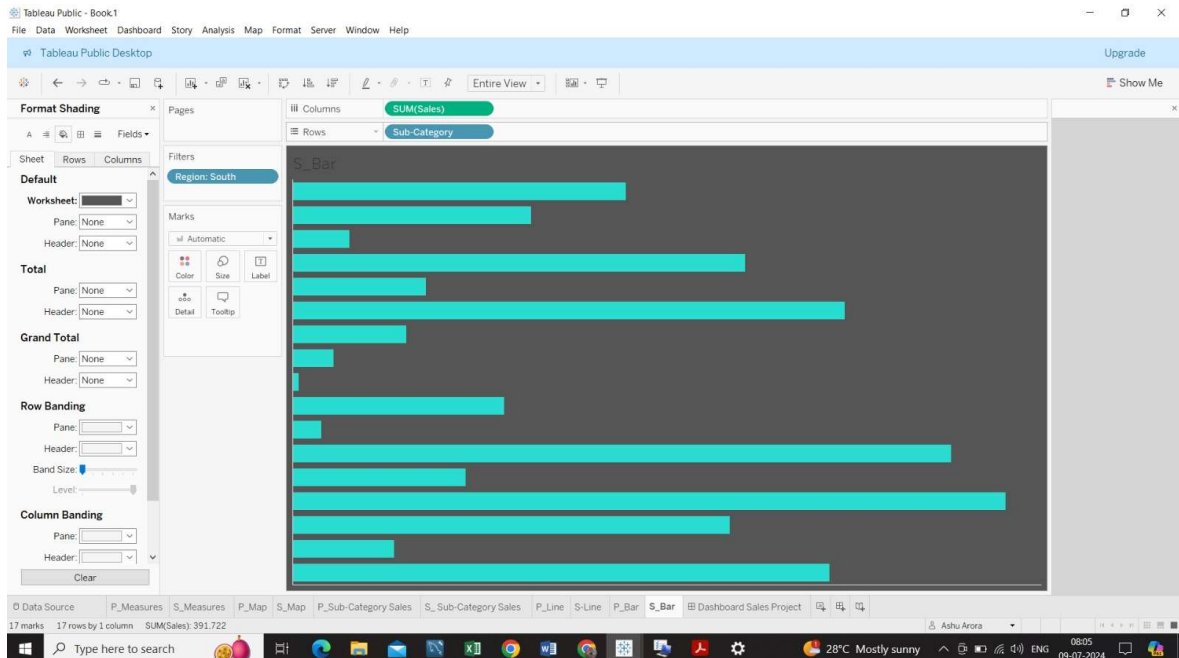
• To format Measures & Dimensions, Background & Bar Colour etc.in P_line, use Format Tab on the top of the Ribbon Bar.



10. Created S_Bar Sheet refers to the Secondary Line sheet. Here data is shown in Bar Chart of sum of total sales of each sub category.



- To format Measures & Dimensions, Background & Bar Colour etc.in S_line, use Format Tab on the top of the Ribbon Bar.



CREATION OF SALES DASHBOARD

❖ Sheet to be used in preparing Region wise comparative Sales Dashboard

1. P_Measures
2. S_Measures
3. P_Map
4. S_Map
5. P_Sub_Category_Sales
6. S_Sub_Category_Sales
7. P_Line
8. S_Line
9. P_Bar
10. S_Bar

❖ Steps Used to Creating Region wise Sales Dashboard :

1. In objects clicked on Horizontal Container, set the dashboard automatic layout.
2. Adjust Horizontal & Vertical Margins as per the requirement.
3. Click on Text Option in the object Column of Dashboard to give the Title to the Dashboard which is “Sales Comparison by region”.
4. In the Left Margin of Sheets the above sheets mentioning above from S.No. 1 to S.No. 10 inserted in the Dashboard Layout margins as required after clicking the Tiled option give below. Also used the Floating option where it is required.
5. Format the background of the same dashboard after clicking on the Format option given on the Ribbon Bar on the top.
6. Remove all the titles of all the inserted sheets in the dashboard.
7. Added a Filter based on the Region after clicking the right click on the P_Map & S_Map sheets. This Filter is giving the actual comparison of sales among all the Four Region i.e. East, West, South, North & Central in all the countries of the continents, based on dates, categories, and sub-categories. Also showing the comparison between maximum, minimum & Totals sales in the each region of the continent.

Comparison of total sales between Central & South region

