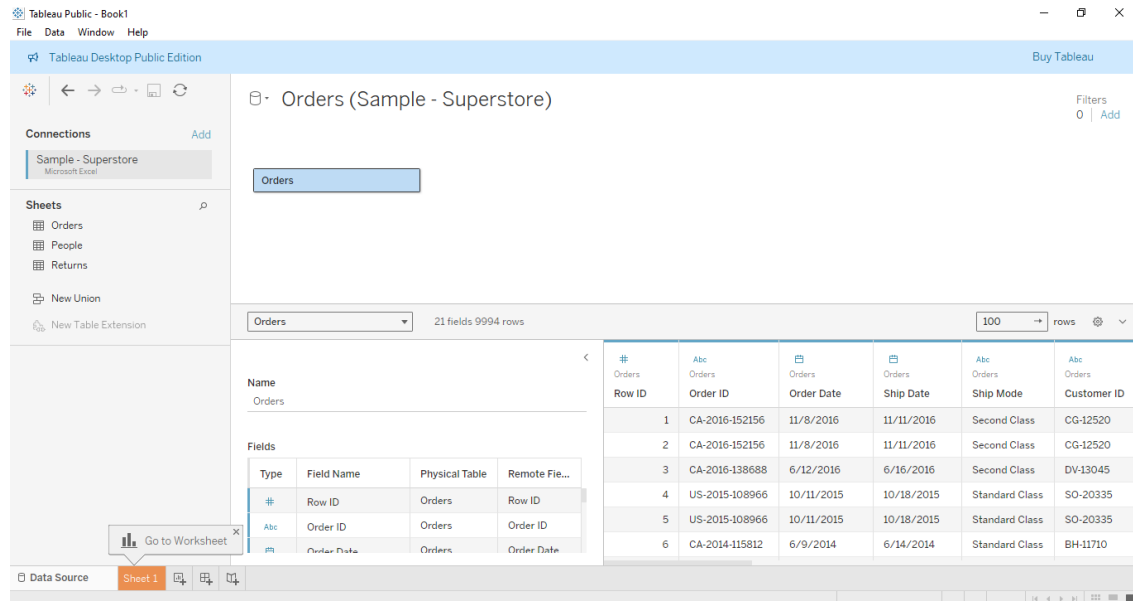
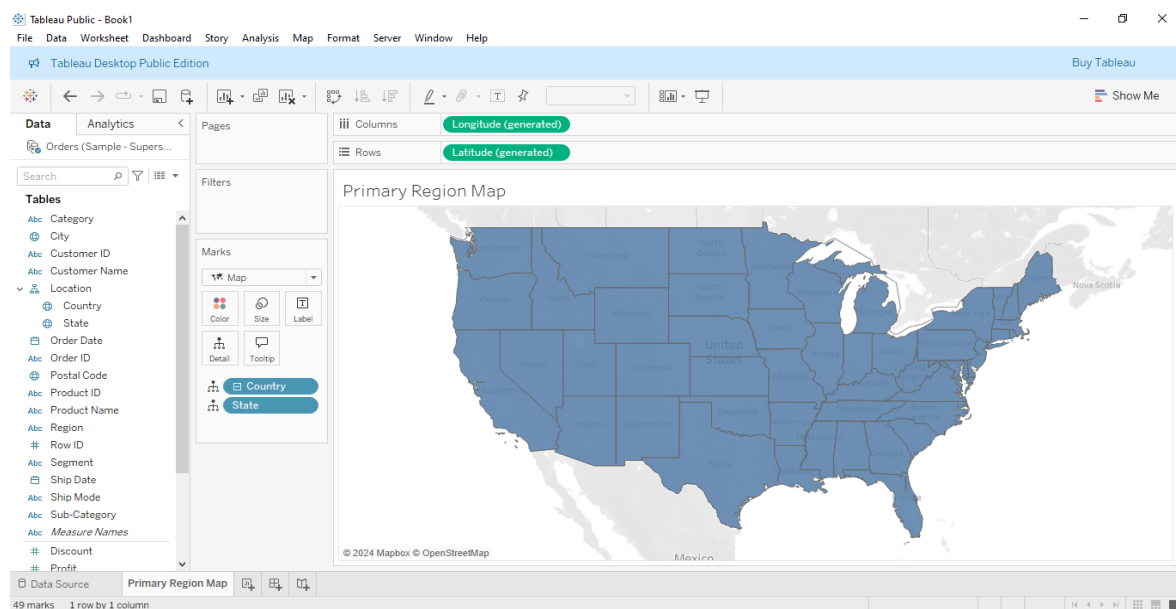


Project Writeup

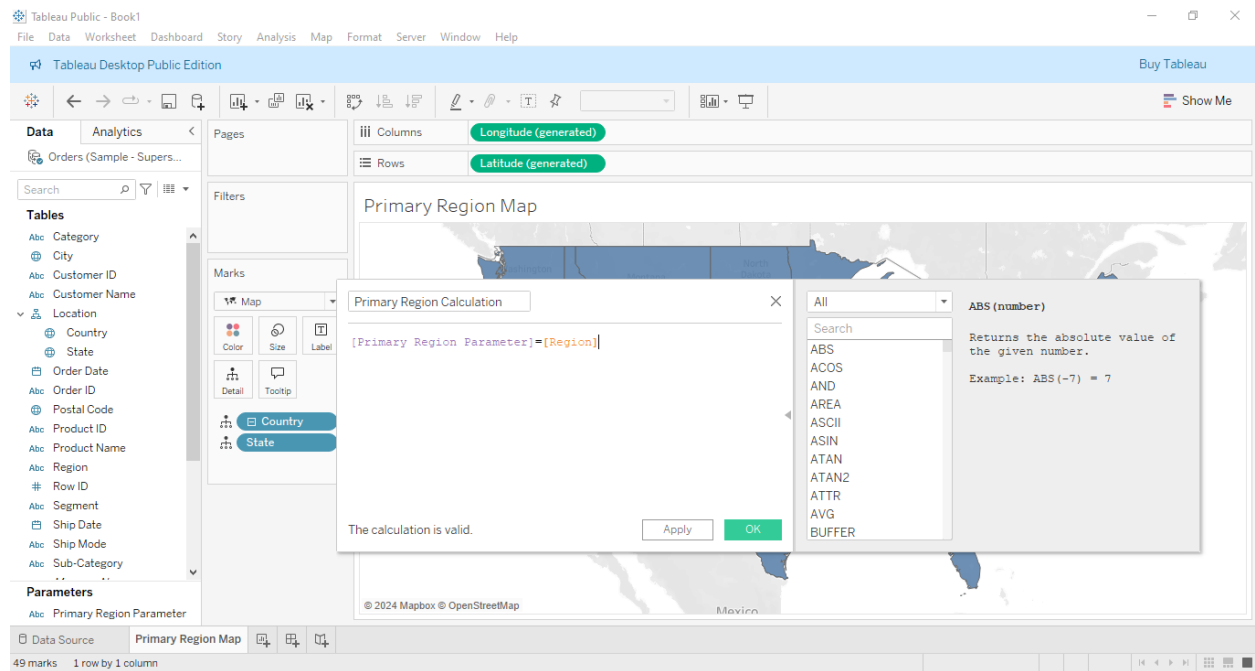
1. Open Tableau Public.
2. Connect it with the data provided from LMS portal.
3. Drag the order the sheet to the Data Modeling Area.



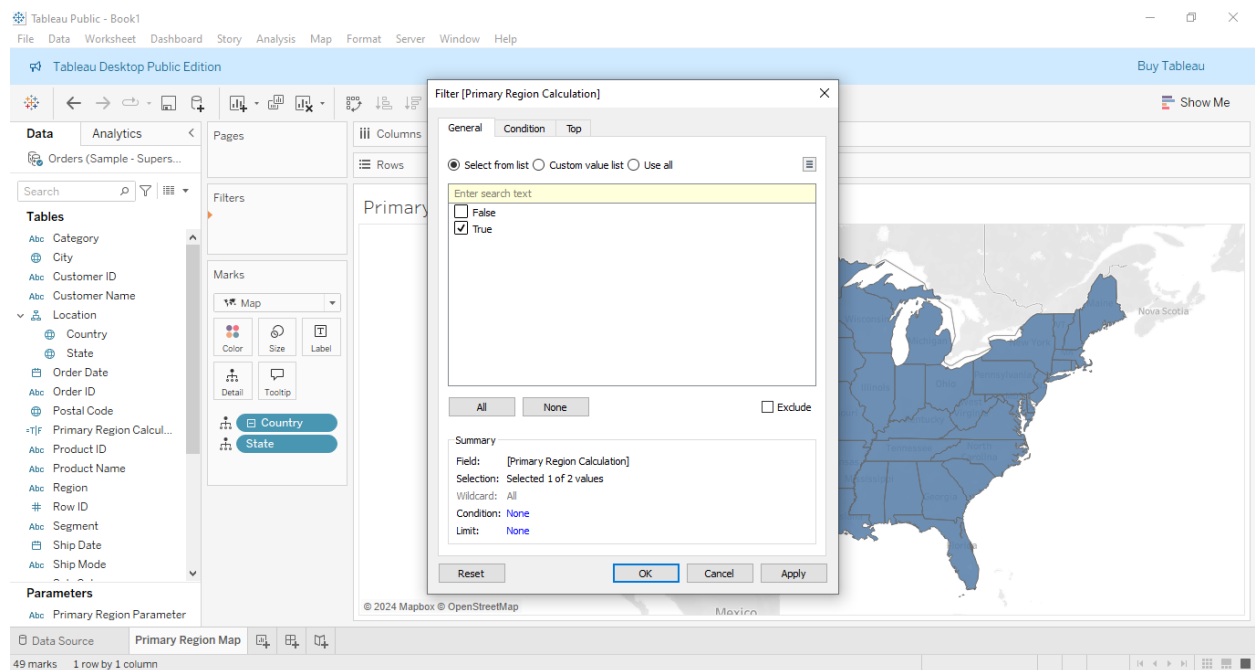
4. Go to Sheet 1.
5. Rename the Sheet as Primary Region Map.
6. Create a hierarchy between Country and State. In order to create a hierarchy, press and hold Ctrl on the keyboard and select Country and State Data field. Then Right click on the State, Go to Hierarchy and select Create Hierarchy. Rename the Hierarchy as Location and Click Ok.
7. Double Click on State field. By default Symbol Maps will be shown. Go to Show Me and Select Maps.



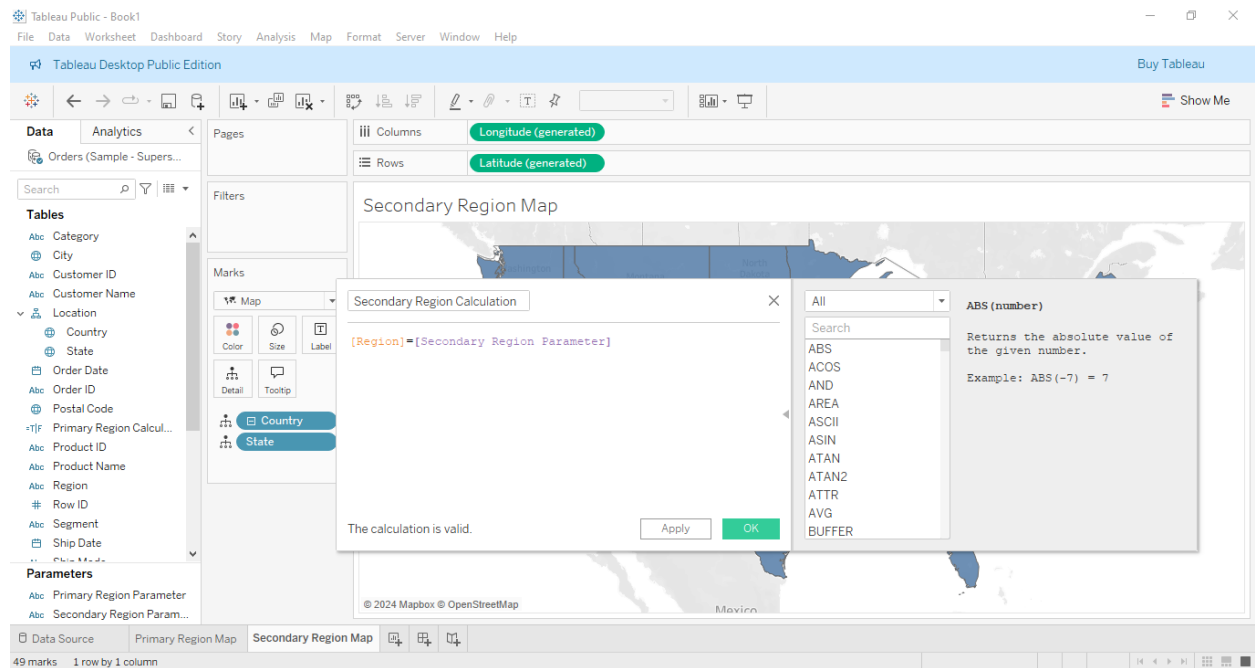
8. Now, create a Parameter to showcase the regions.
9. Right click on the Region field, Go to Create and select Parameter.
10. Rename the Parameter as Primary Region Parameter. Click Ok.
11. Create a Calculated Field. Rename the Calculation as Primary Region Calculation. The calculation as: [Primary Region Parameter]=[Region]. Click Ok.



12. Drag the calculation to Filters Shelf. Select True and Click Ok.



13. Now click on New Worksheet and create a new worksheet.
14. Rename the Sheet as Secondary Region Map.
15. Double click on State field under Location hierarchy. By default a Symbol Map is created. Go to Show me and click on Maps.
16. Now, go to Region Field and again create a Parameter on Region. Rename the Parameter as Secondary Region Parameter and Click Ok.
17. Create a Calculated Field. Rename the field as Secondary Region Calculation. Write the calculation as: $[Region]=[Secondary\ Region\ Parameter]$ and Click Ok.



18. Drag the Calculation to Filters Shelf. Click on True and Select Ok.
19. Create a New Worksheet. By default, the sheet name will be Sheet 3. Keep it unchanged.
20. Drag the following fields to Detail under Marks Card:
 - a) Order Date: After dragging it to Detail, right click on it and select Exact Date and then again right click on it and select Discrete. Right Click on it, go to Measure and convert it to Minimum.
 - b) Drag Sales into Detail. Right click on it and go to Format. Go to Pane Tab. Under Default, click on Numbers. Go to Number (Custom). Reduce the number of decimals to 0. Then go to Currency (Standard) and select English (United States) and go to Currency (Custom) and reduce the decimal places to 0.
 - c) In order to get the Average Sales Per Order, create a Calculated Field. Rename the field as Avg Sales Per Order. Write the calculation as $SUM([Sales])/COUNT([Order\ ID])$. Click Ok. After creating the calculation, drag it to Details. Right click on it and go to Format. Go to Pane Tab. Under Default, click on Numbers. Go to Number (Custom). Reduce the number of decimals to 0. Then go to Currency (Standard) and select English (United States) and go to Currency (Custom) and reduce the decimal places to 0.

22. Drag the Primary Region Calculation to Filters Shelf. Select True and Click Ok.
23. In the Marks Card, instead of Automatic, Select Polygon.
24. Now duplicate the Sheet 3 and rename it as Sheet 4. Remove the Calculation from Filters Shelf and drag the Secondary Region Calculation in the Filters Shelf. Select True and Click Ok.
25. Create a New Worksheet. By default the Sheet will be Sheet 5. Rename it as Primary Region Sales Details. Drag Sub-Category field into the Rows. Drag Sales into Rows. Right click on the Sum(Sales) in Rows and convert it to Discrete. Right click on it again. Go to format. Under Headers Tab, click on Numbers under Default. Click on Currency (Custom). Change the number of decimal places to 0 and Prefix as \$.
26. Drag another Sales field into Rows and convert it to Discrete. Then go to Measure and select Minimum. Change the format as Pt 25.
27. Then Drag another Sales field into Text under Marks Card. Right click on the Field and convert it to Discrete. Convert the aggregate to Maximum. Double click on columns and add a field as 'Max. Sales'. Right Click on 'Max. Sales' in the Visualisation area and Click on Hide Field Labels for Columns.
28. Drag the Primary Region Calculation to Filters Shelf. Select True and Click Ok.
29. Convert the View to Entire View instead of Standard View in the Toolbar.

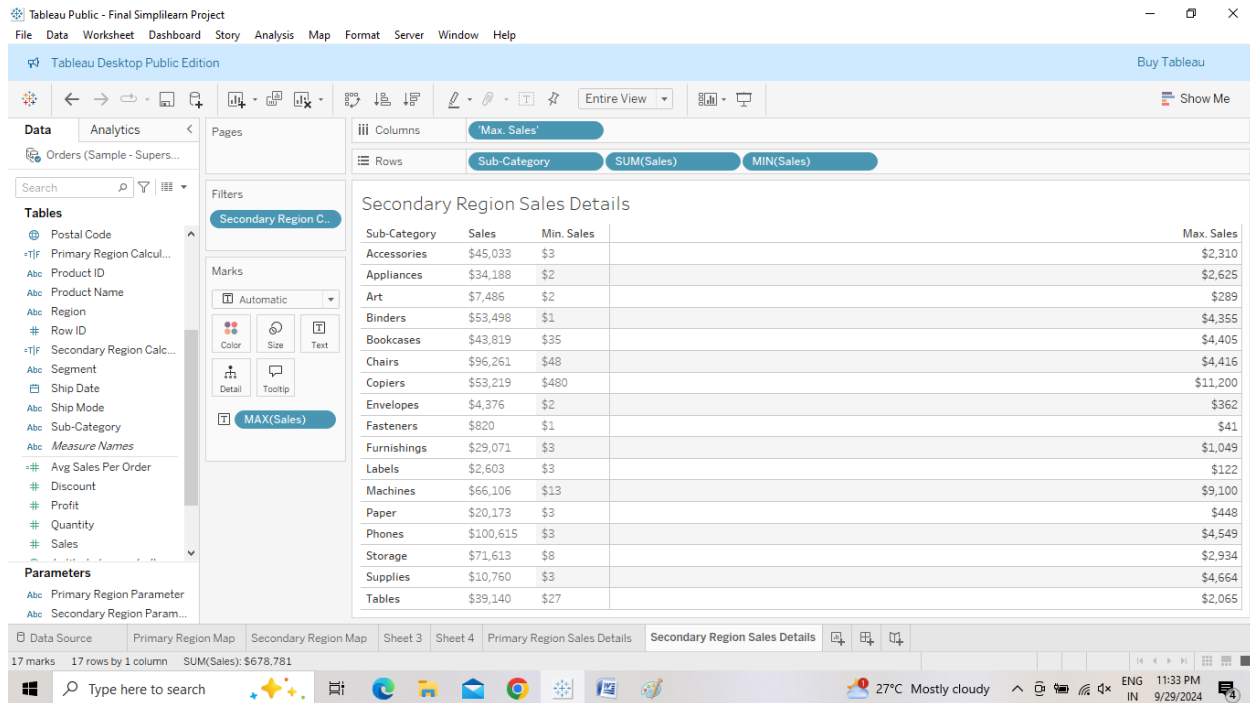
Tableau Desktop Public Edition

Primary Region Sales Details

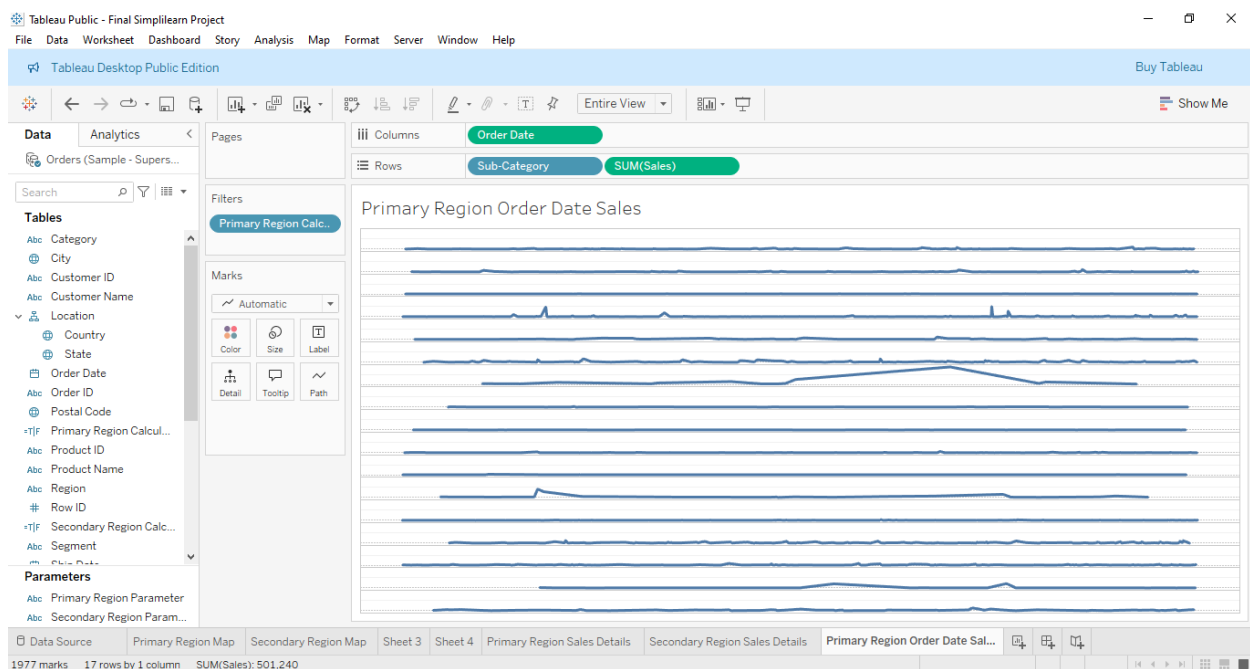
Sub-Category	Sales	Min. Sales	Max. Sales
Accessories	\$33,956	\$2	\$1,929
Appliances	\$23,582	\$0	\$2,405
Art	\$5,765	\$1	\$210
Binders	\$56,923	\$1	\$9,893
Bookcases	\$24,157	\$68	\$2,396
Chairs	\$85,231	\$27	\$3,505
Copiers	\$37,260	\$320	\$17,500
Envelopes	\$4,637	\$2	\$605
Fasteners	\$778	\$2	\$58
Furnishings	\$15,254	\$2	\$1,336
Labels	\$2,451	\$2	\$492
Machines	\$26,797	\$84	\$8,160
Paper	\$17,492	\$4	\$629
Phones	\$72,403	\$6	\$2,736
Storage	\$45,930	\$9	\$1,555
Supplies	\$9,467	\$2	\$4,164
Tables	\$39,155	\$67	\$2,679

17 marks 17 rows by 1 column SUM(Sales): \$501,240

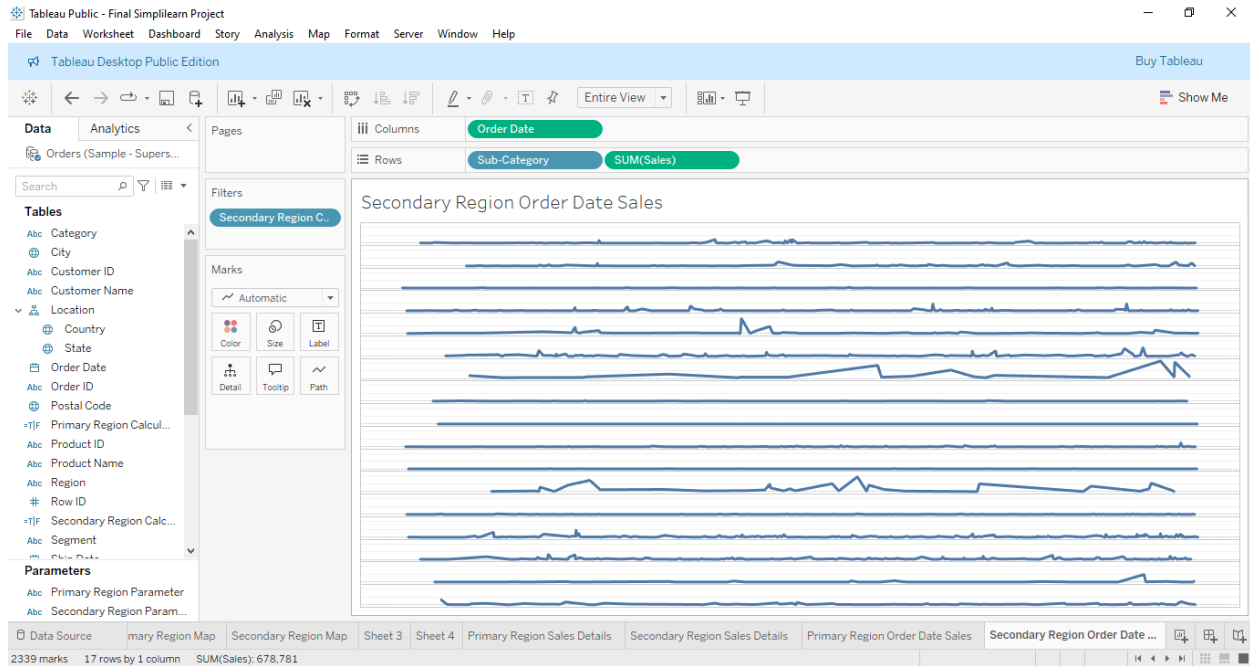
30. Duplicate the Primary Region Sales Details Worksheet. Rename the same as Secondary Region Sales Details.
31. Now, remove the Primary Region Calculation from Filters and drag the Secondary Region Calculation. Select True and Click Ok.



32. Create a New Worksheet. Rename the Sheet as Primary Region Order Date Sales. Drag Sub-Category and Sales into Rows. Drag Order Date into Columns. Convert the view from Standard to Entire View.
33. Now, right click on each field dragged into Rows and Columns and uncheck the Show Header option.
34. Drag the Primary Region Calculation into the Filters Shelf. Select True and Click Ok.

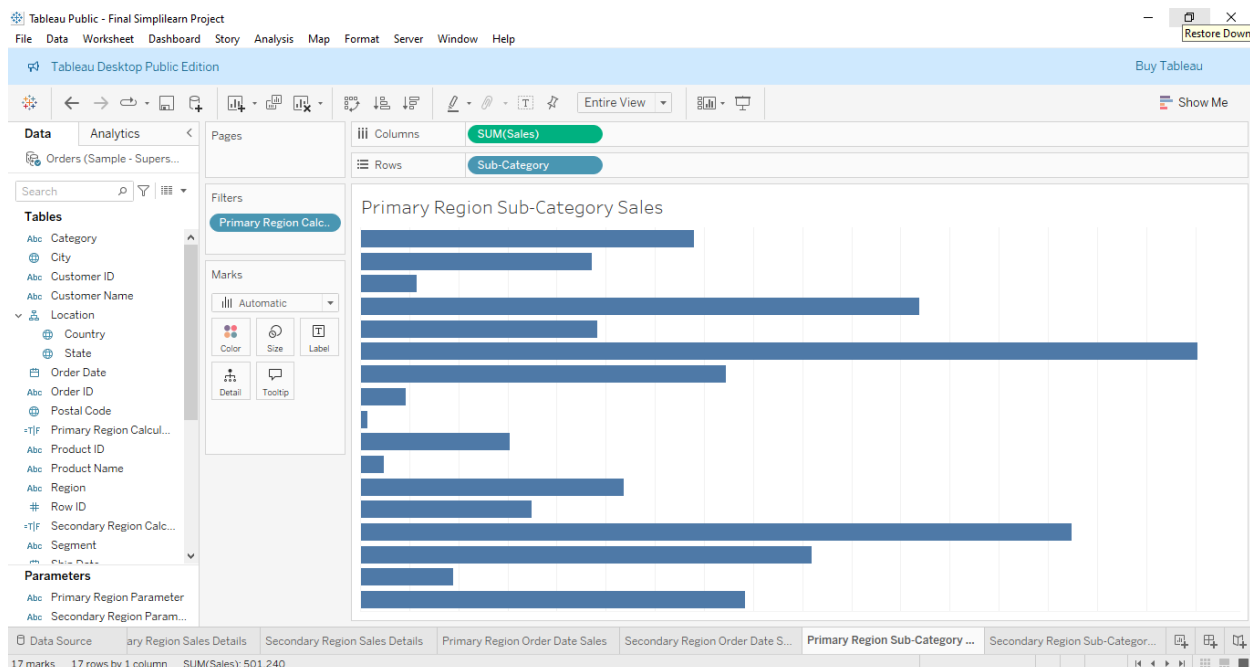


35. Duplicate the Primary Region Order Date Sales. Rename the Sheet as Secondary Region Order Date Sales. Now remove the Primary Region Calculation from Filters Shelf. Drag and drop the Secondary Region Calculation into the Filters Shelf. Select True and Click Ok.

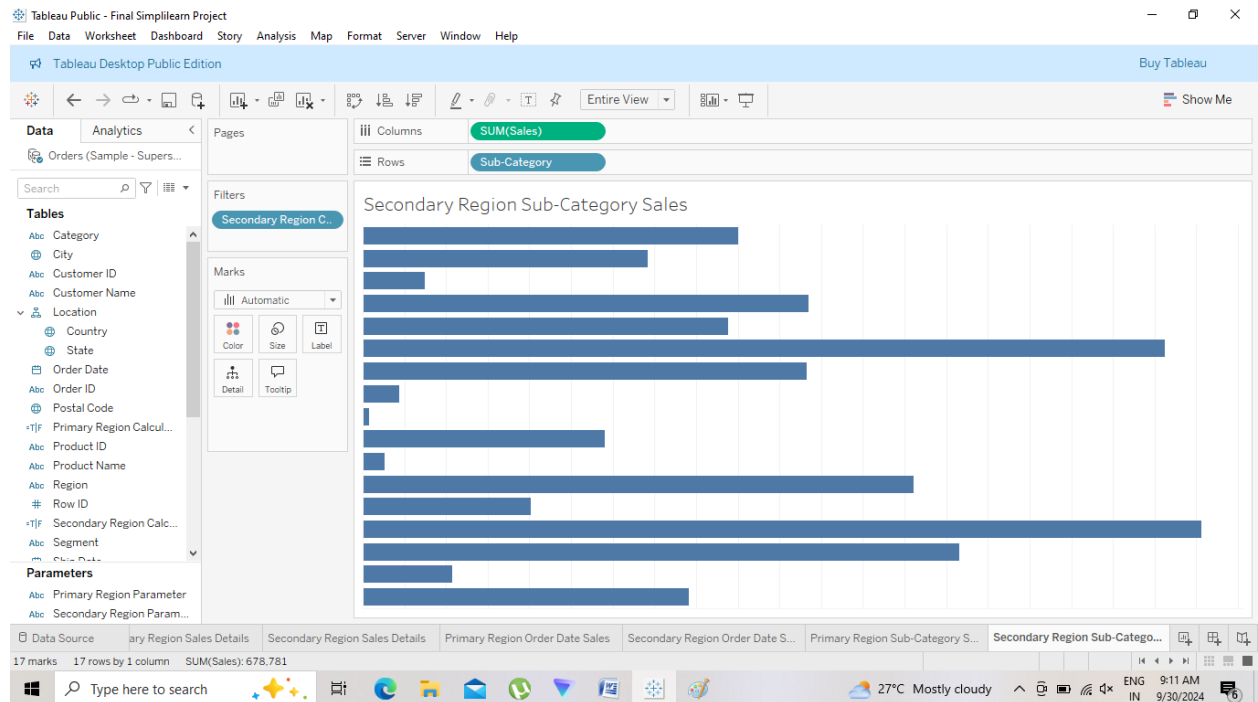


36. Create a New Work Sheet. Rename it as Primary Region Sub-Category Sales. Drag Sub-Category into Rows and Sales into Columns. Now Right click on the fields dragged into Rows and Columns and uncheck Show Header Option. Convert the view from Standard to Entire View.

37. Drag the Primary Region Calculation to Filters Shelf. Select True and click Ok.



38. Duplicate the Primary Region Sub-Category Sales Worksheet. Rename it as Secondary Region Sub-Category Sales. Remove the Primary Region Calculation from Filters Shelf and Drag and Drop Secondary Region Calculation into the Filters Shelf. Select True and Click Ok.



39. Create a Dashboard. In order to create a new Dashboard, click on New Dashboard option.
40. Select the size of the Dashboard to Automatic in order to adjust the view on other screens. Drag a Vertical Object to fit the Dashboard. Then drag a Text Object to cover the top half of the Dashboard. Edit the title as Sales Comparison by Region. Adjust the Font and Click Ok.
41. Decrease the height of the Text Object.
42. Insert two Text Object below the above Text Object adjacent to each other and insert the text as Primary Region and Secondary Region respectively.
43. Then insert two text objects. On the tab, go to Insert and insert the values of the two parameters, i.e, Primary Region Parameter and Secondary Region Parameter respectively. This will show the selected region values in the Dashboard.
44. Now below it drag horizontal containers in order to show the sheets and the parameter control.
45. After dragging the sheets to their respective containers, ensure towards hiding the title. Also adjust the fit to entire view.
46. For the line and bar graph chart, adjust the outer padding. Go to Layout tab, then click on outer padding. Uncheck all sides equal, and keep the top value as 23 and all other values as 4. This will provide us with the requisite dashboard.

The Final Dashboard

Tableau Desktop Public Edition

Buy Tableau

Sales Comparison by Region

Primary Region

Secondary Region

Central

East

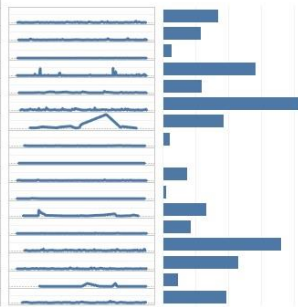
First Order Date: 1/3/2014
Total Sales: \$501,240
Average Sales per Order: \$216
No of Customers: 629
No of Orders: 1,175
No of Products in Sales: 1,295



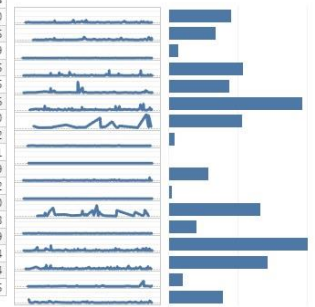
First Order Date: 1/5/2014
Total Sales: \$678,781
Average Sales per Order: \$288
No of Customers: 674
No of Orders: 1,401
No of Products in Sales: 1,415



Sub-Category	Sales	Min. Sales	Max. Sales
Accessories	\$33,956	\$2	\$1,929
Appliances	\$23,582	\$0	\$2,405
Art	\$5,765	\$1	\$210
Binders	\$56,923	\$1	\$9,893
Bookcases	\$24,157	\$68	\$2,396
Chairs	\$85,231	\$27	\$3,505
Copiers	\$37,260	\$320	\$17,500
Envelopes	\$4,637	\$2	\$605
Fasteners	\$778	\$2	\$58
Furnishings	\$15,254	\$2	\$1,336
Labels	\$2,451	\$2	\$492
Machines	\$26,797	\$84	\$8,160
Paper	\$17,492	\$4	\$629
Phones	\$72,403	\$6	\$2,736
Storage	\$45,930	\$9	\$1,555
Supplies	\$9,467	\$2	\$4,164
Tables	\$39,155	\$67	\$2,679



Sub-Category	Sales	Min. Sales	Max. Sales
Accessories	\$45,033	\$3	\$2,310
Appliances	\$34,188	\$2	\$2,625
Art	\$7,486	\$2	\$289
Binders	\$53,498	\$1	\$4,355
Bookcases	\$43,819	\$35	\$4,405
Chairs	\$96,261	\$48	\$4,416
Copiers	\$53,219	\$480	\$11,200
Envelopes	\$4,376	\$2	\$362
Fasteners	\$820	\$1	\$41
Furnishings	\$29,071	\$3	\$1,049
Labels	\$2,603	\$3	\$122
Machines	\$66,106	\$13	\$9,100
Paper	\$20,173	\$3	\$448
Phones	\$100,615	\$3	\$4,549
Storage	\$71,613	\$8	\$2,934
Supplies	\$10,760	\$3	\$4,664
Tables	\$39,140	\$27	\$2,065



Primary Re..

Central

Secondary ..

East

Region Sales Details

Secondary Region Sales Details

Primary Region Order Date Sales

Secondary Region Order Date S...

Primary Region Sub-Category S...

Secondary Region Sub-Categor...

Dashboard 1

