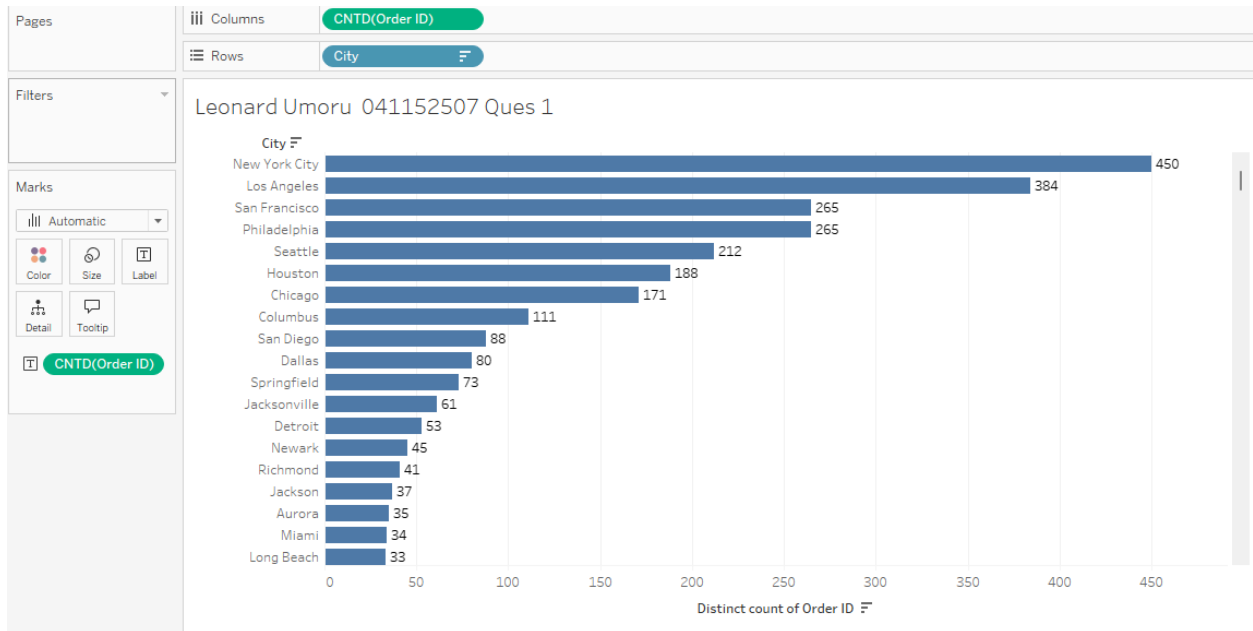


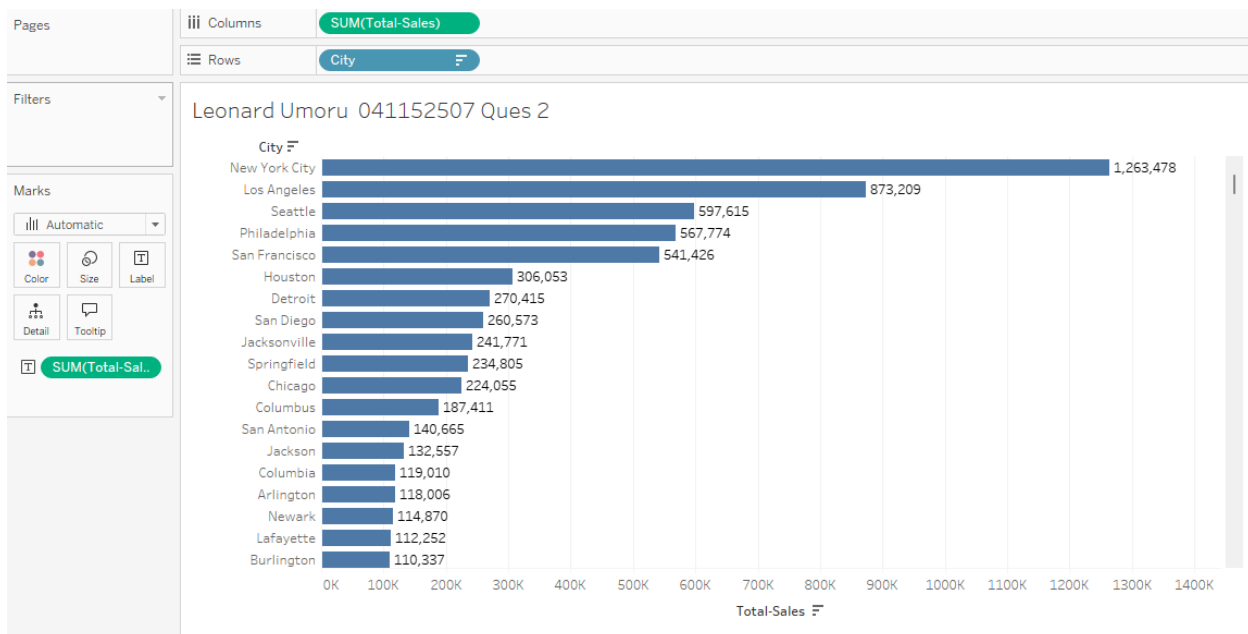
CST2111_010_011 Data Visualization Assignment 1

Question 1: Find the count of orders in each city.



I used a Bar Chart here because it is easy to see the values, and the differences between the different cities in terms of order count.

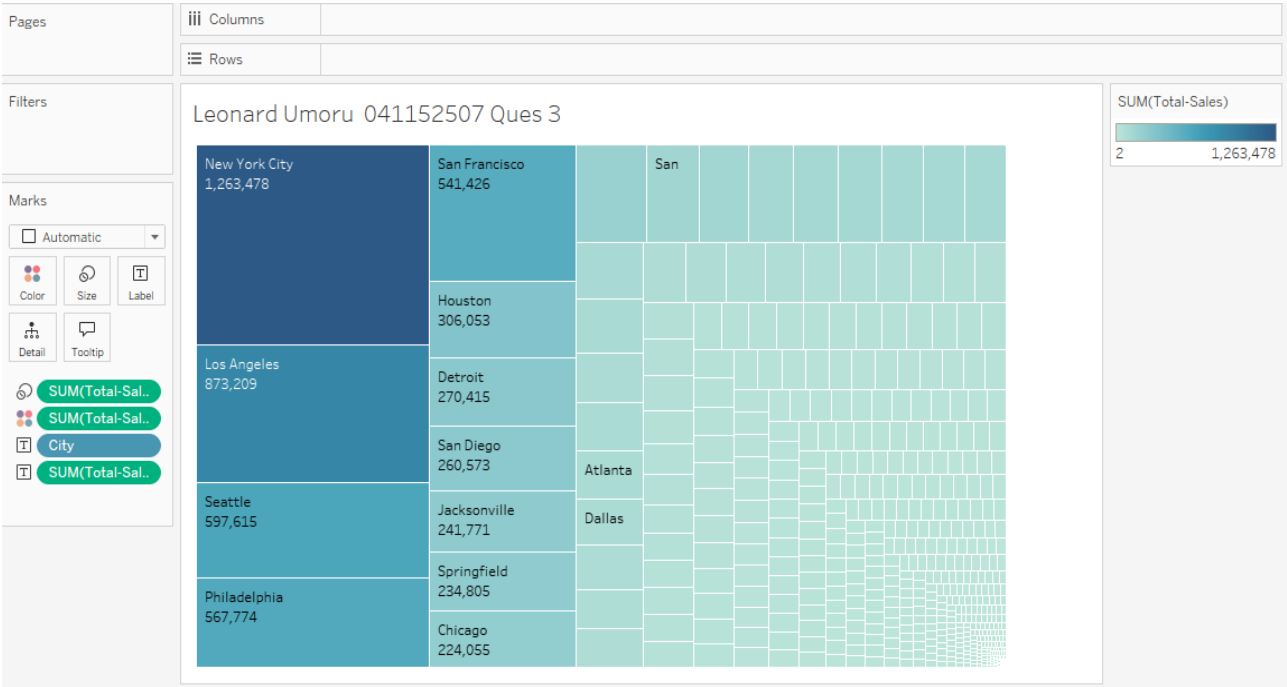
Question 2: Find the total sales in each city.



I used a Bar Chart for the same reason as question 1. It is easy to see the values and the differences between the different cities in terms of total sales.

Question 3: Which city has the highest sales?

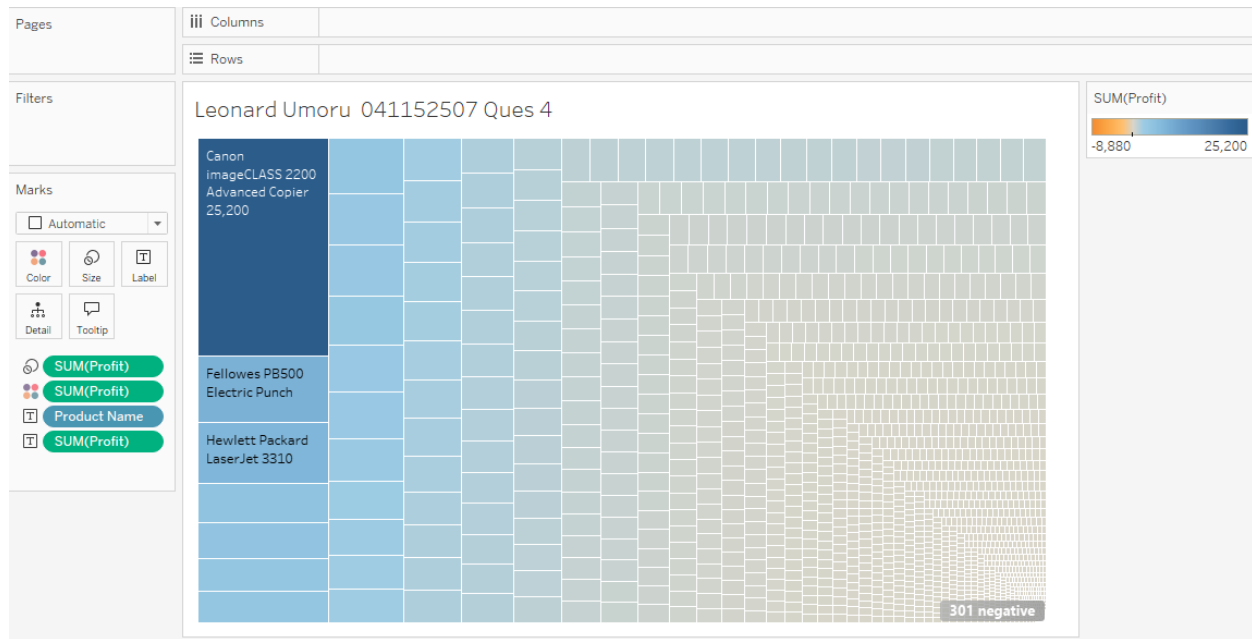
The city with the highest sales is New York City with 1,263,478.



I chose to use Tree Map here because it is good for visualizing hierarchical data such as which categories have the highest value.

Question 4: Which product offers higher profit?

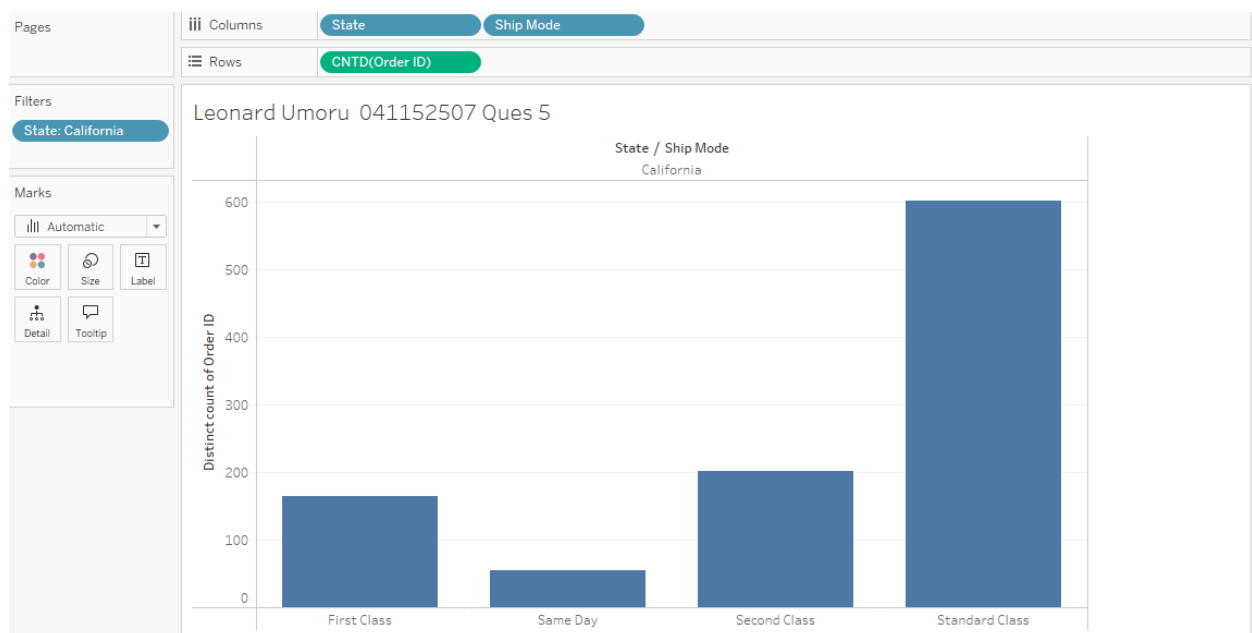
The product that offers the highest profit is Canon imageCLASS 2200 Advanced Copier with 25,200.



For the same reason as in Question 3, I decided to use Tree Map here to show the category with the highest value. Here I used a color scale going from dark blue to light red, with blue being positive values (profit in this case) and light red being negative values (loss in this case).

Question 5: Which shipping mode is the most preferred in California?

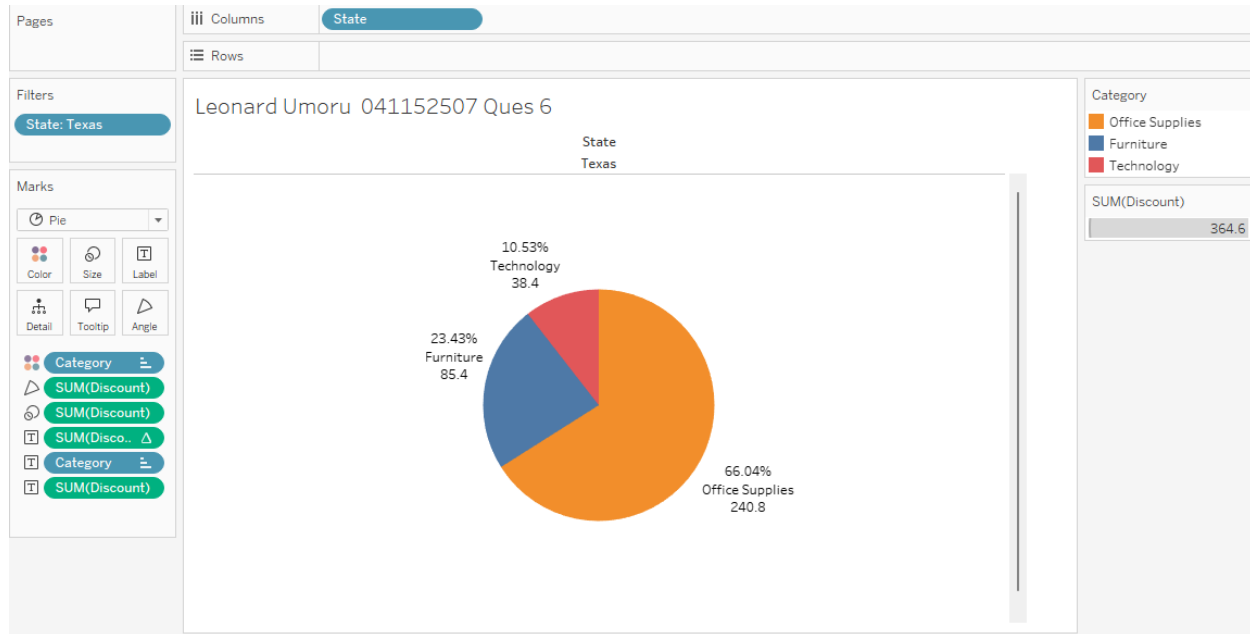
The most preferred shipping mode in California is Standard Class.



I picked a Bar Chart to visualize this set of data because it has few categories, so it is easy to compare and see the difference between the different shipping mode.

Question 6: Which category offers high discounts in Texas?

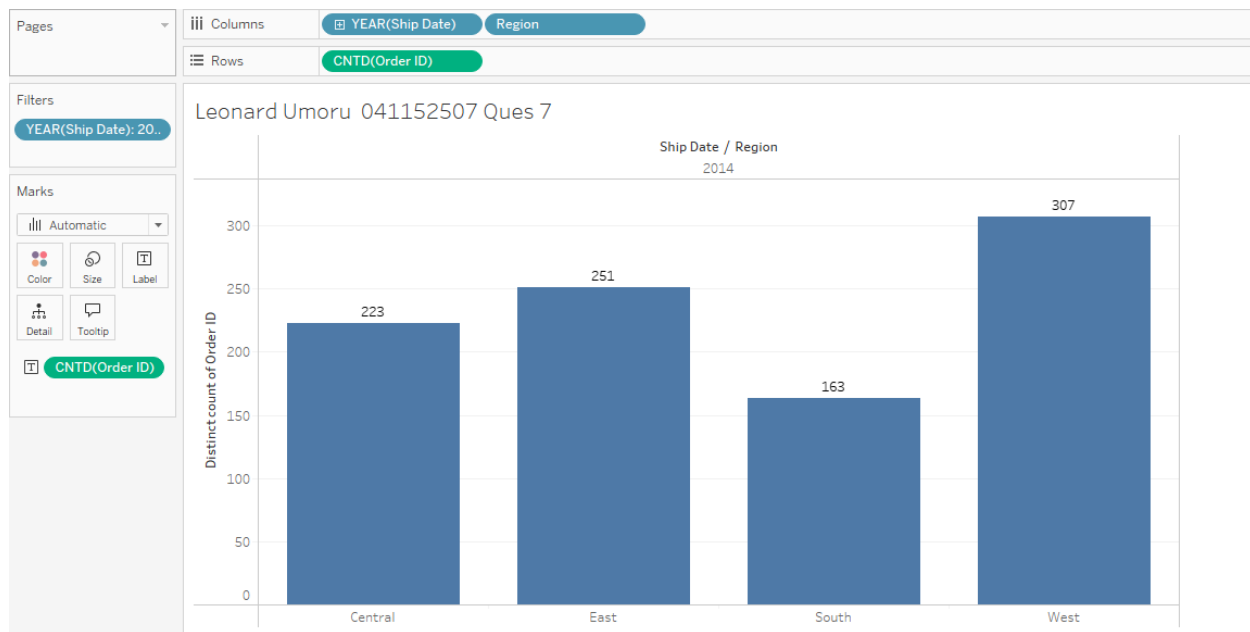
The category that offers high discounts in Texas is Office Supplies, with 240.8 which is 66.04% of the total discounts of all categories.



I chose to use a Pie Chart for this set of data, because it has only 3 categories, therefore it is easy to visualize in this format showing the disparity of each category with its percentage and number.

Question 7: How many orders shipped in 2014 for the south region?

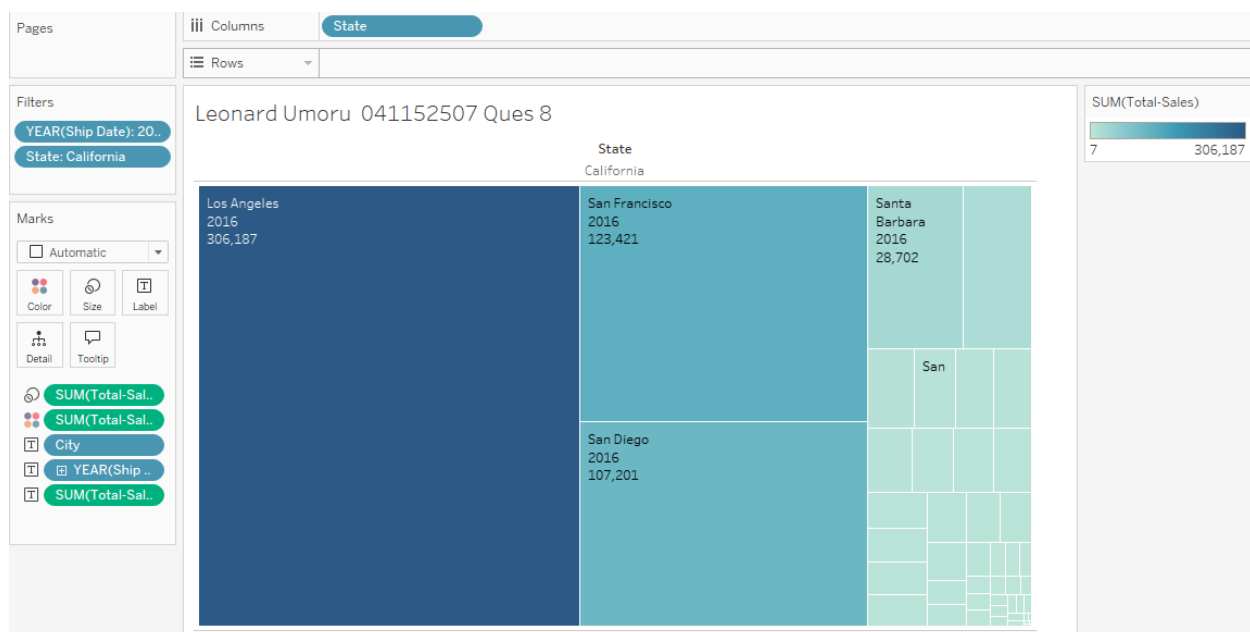
For the south region, 163 orders were shipped in 2014.



I chose to use a Bar Chart here for the same reasons as in Questions 5 and 6.

Question 8: In California, which city had the highest sales in 2016?

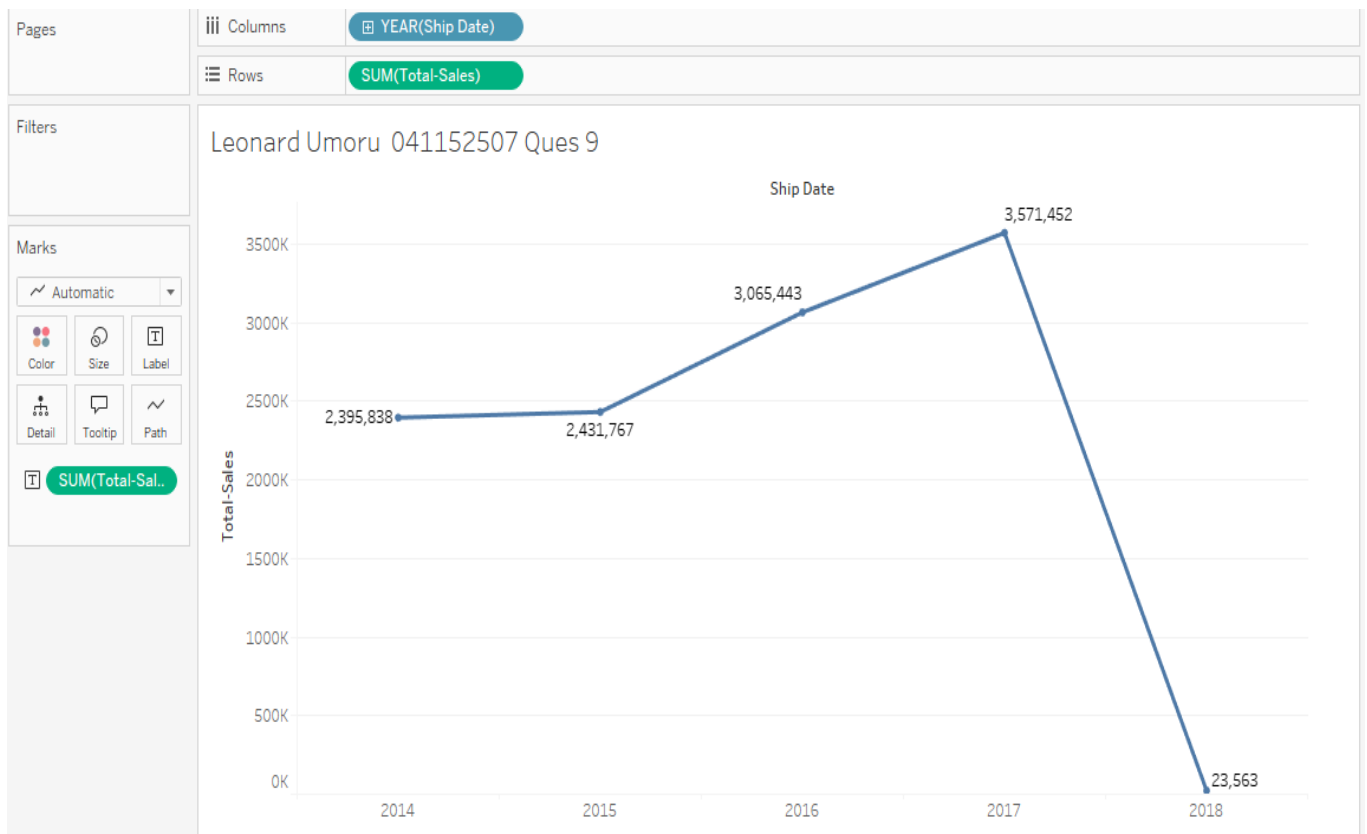
In California, Los Angeles is the city with the highest sales in 2016, with 306,187.



I chose to use a Tree Map here, for the same reasons as in Questions 3 and 4.

Question 9: Which year has the highest sales?

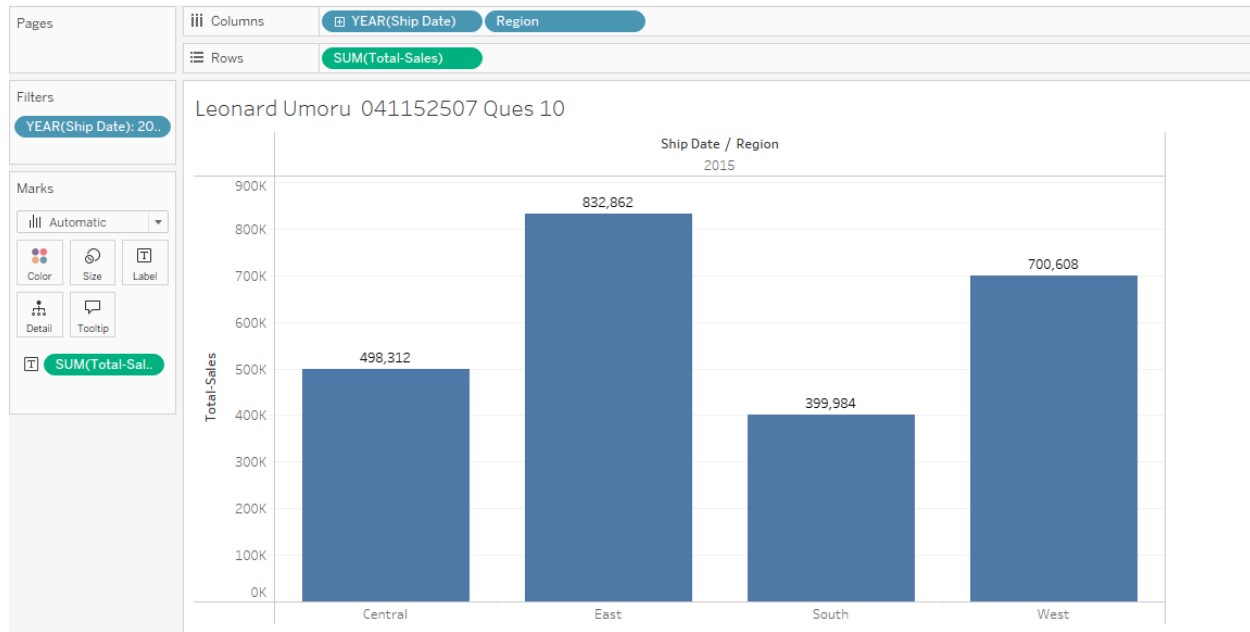
The year with the highest sales is 2017, with 3,571,452.



I chose to visualize this set of data using a Line Chart to show the trend of sales across the given years (2014 to 2018). With this chart type, one can easily see the years with the highest and lowest sales.

Question 10: Which region is the highest revenue generator in 2015?

The region with the highest revenue generator in 2015 is the East Region, with 832,862.



I picked a Bar Chart here for the same reasons as in Questions 5, 6 and 7.