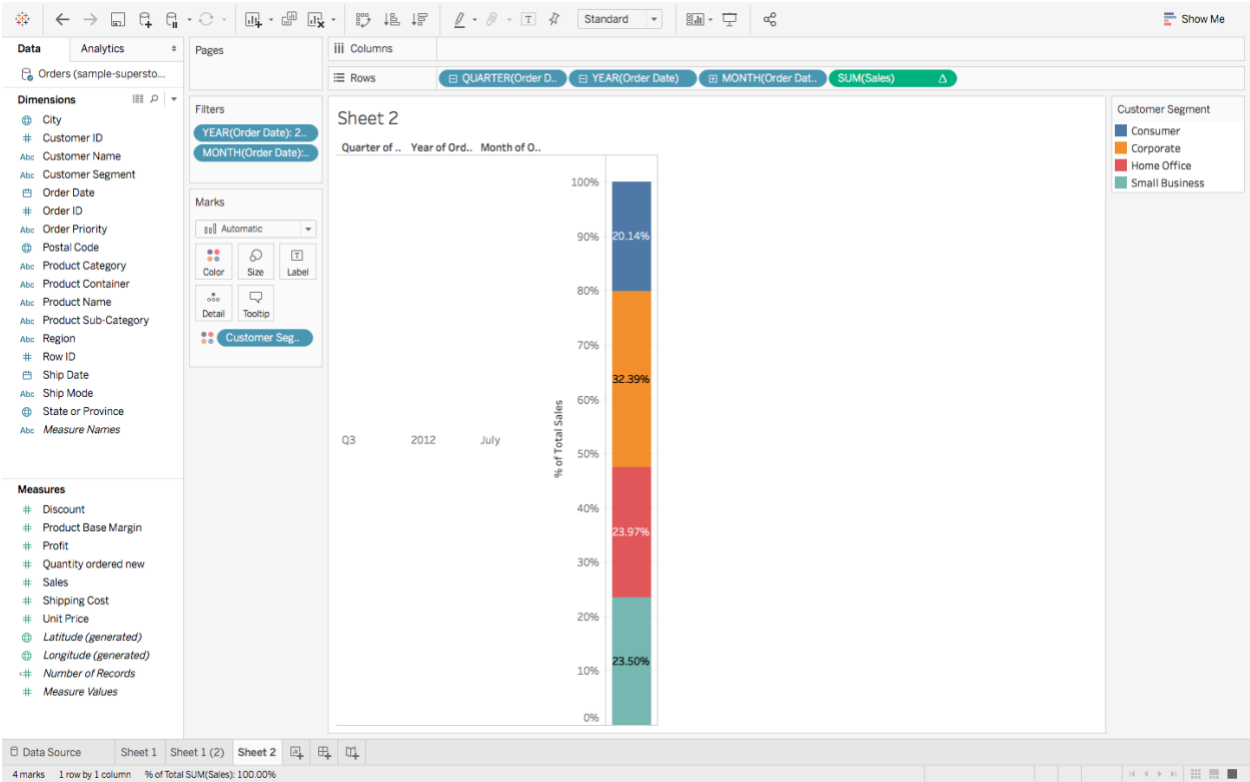


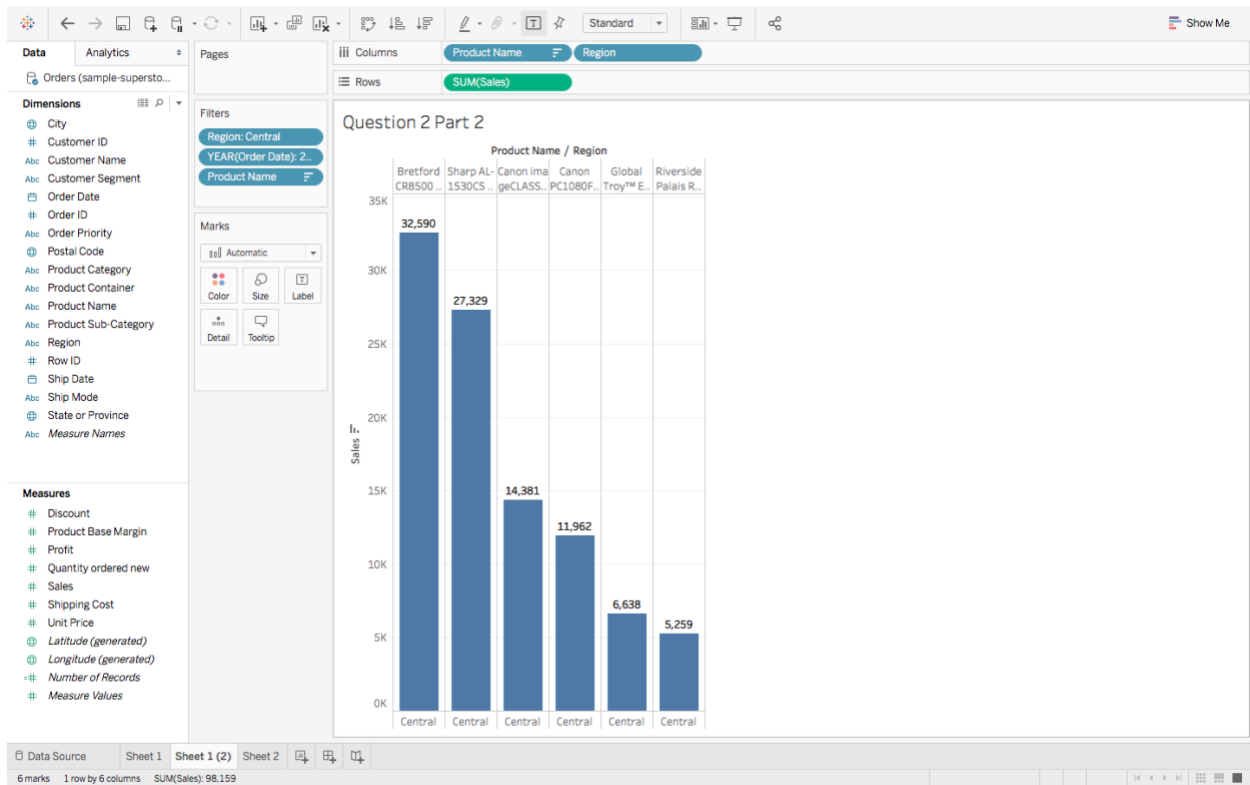
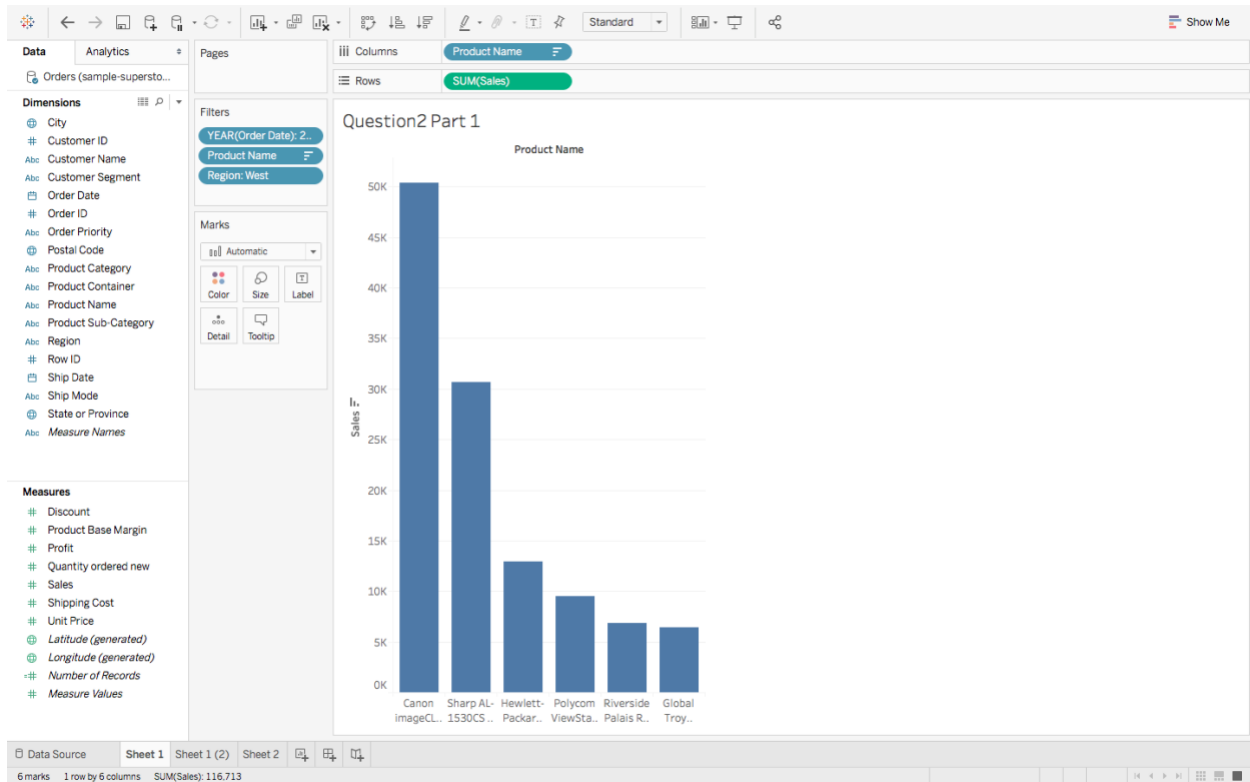
INTRODUCTION TO DATA SCIENCE

ASSIGNMENT 1

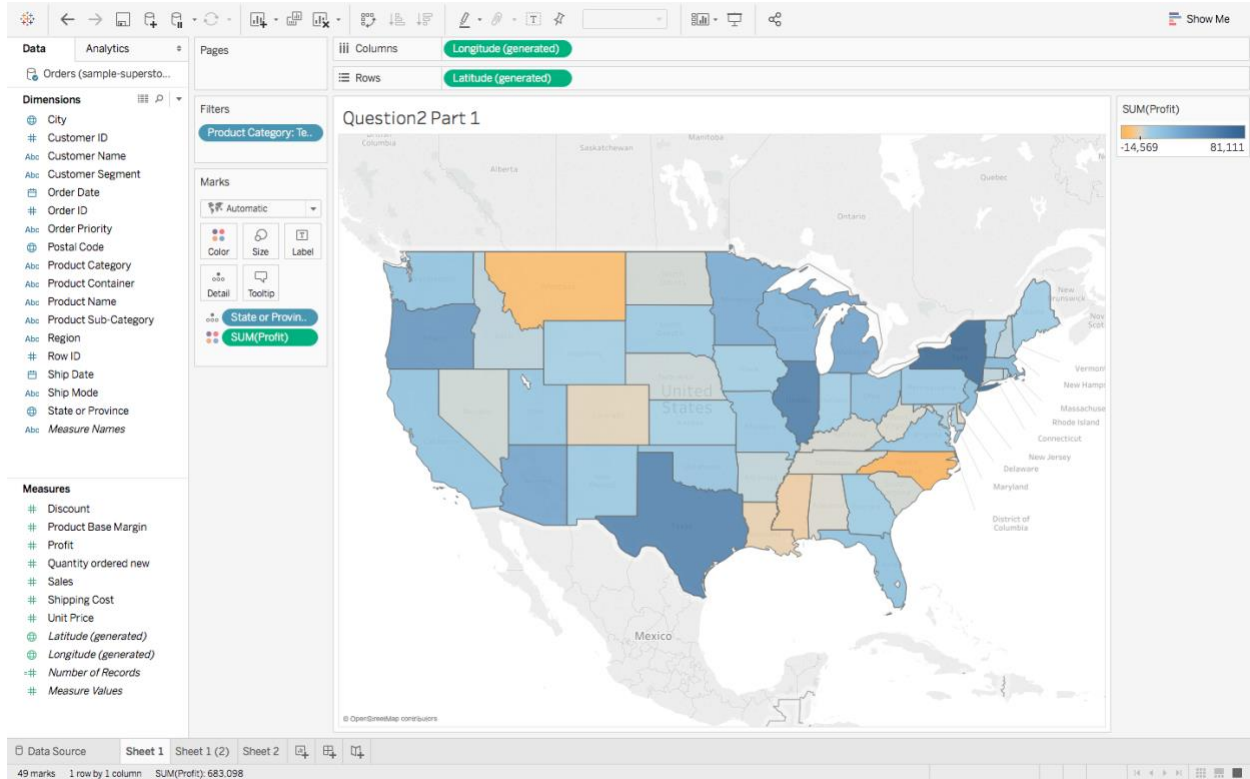
Q1) B



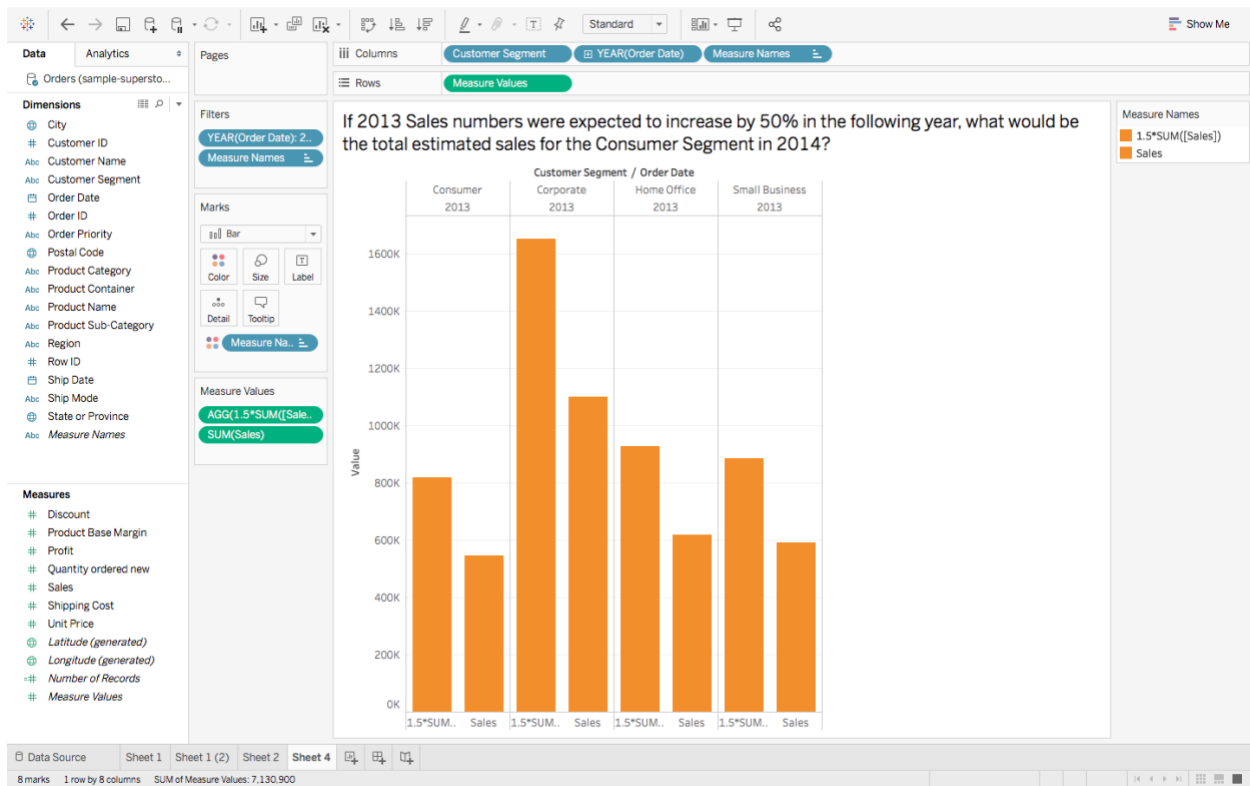
Q2) C



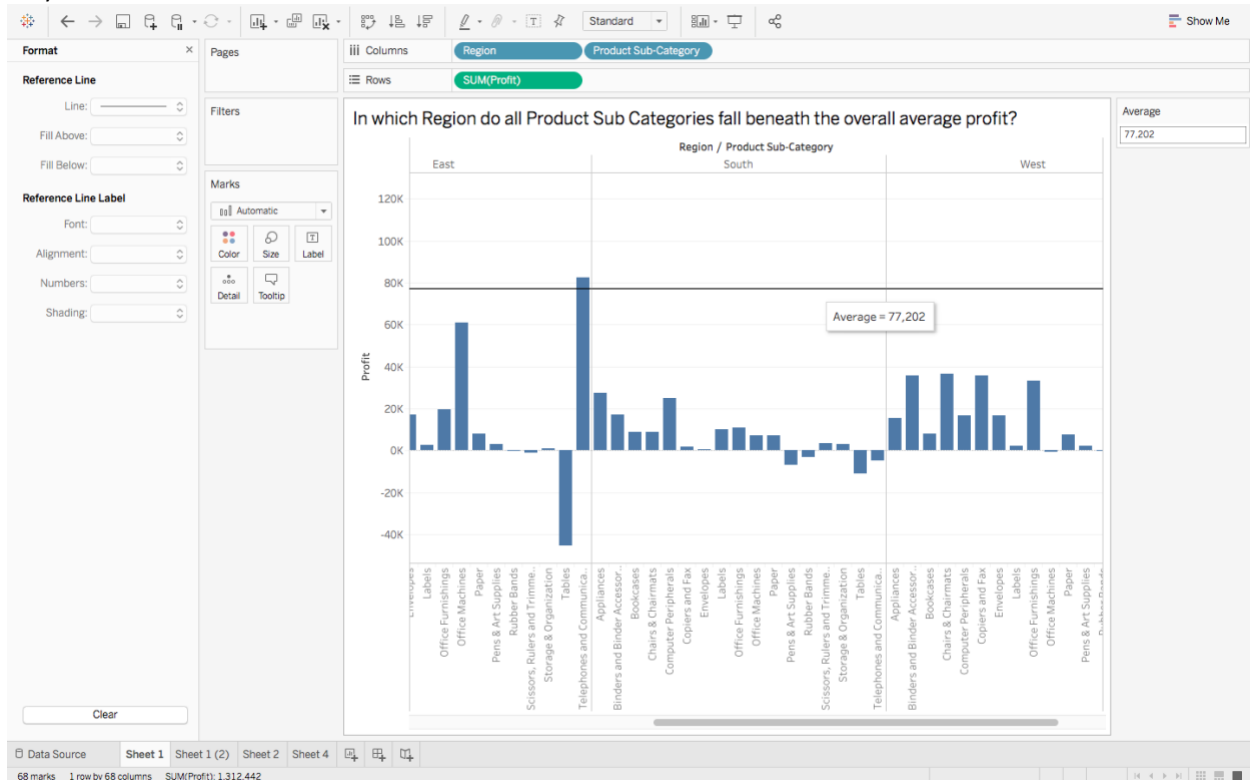
Q3) A



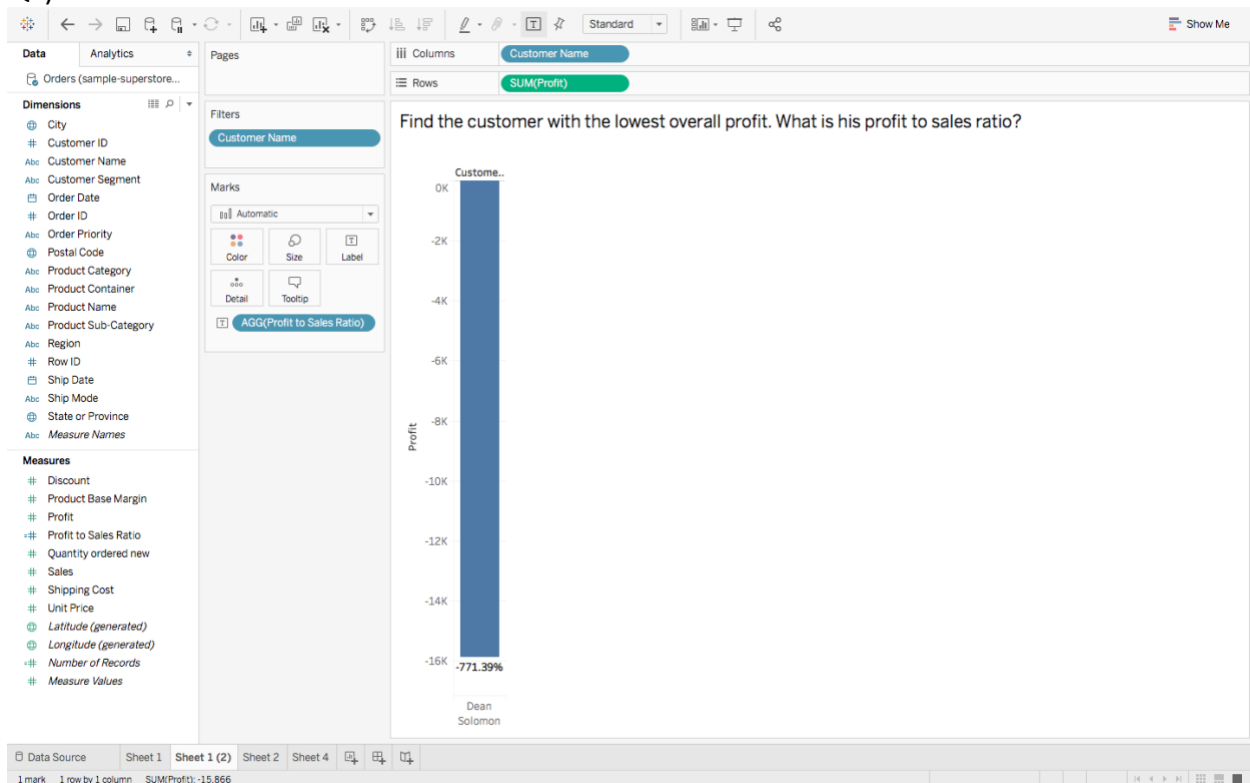
Q4) B



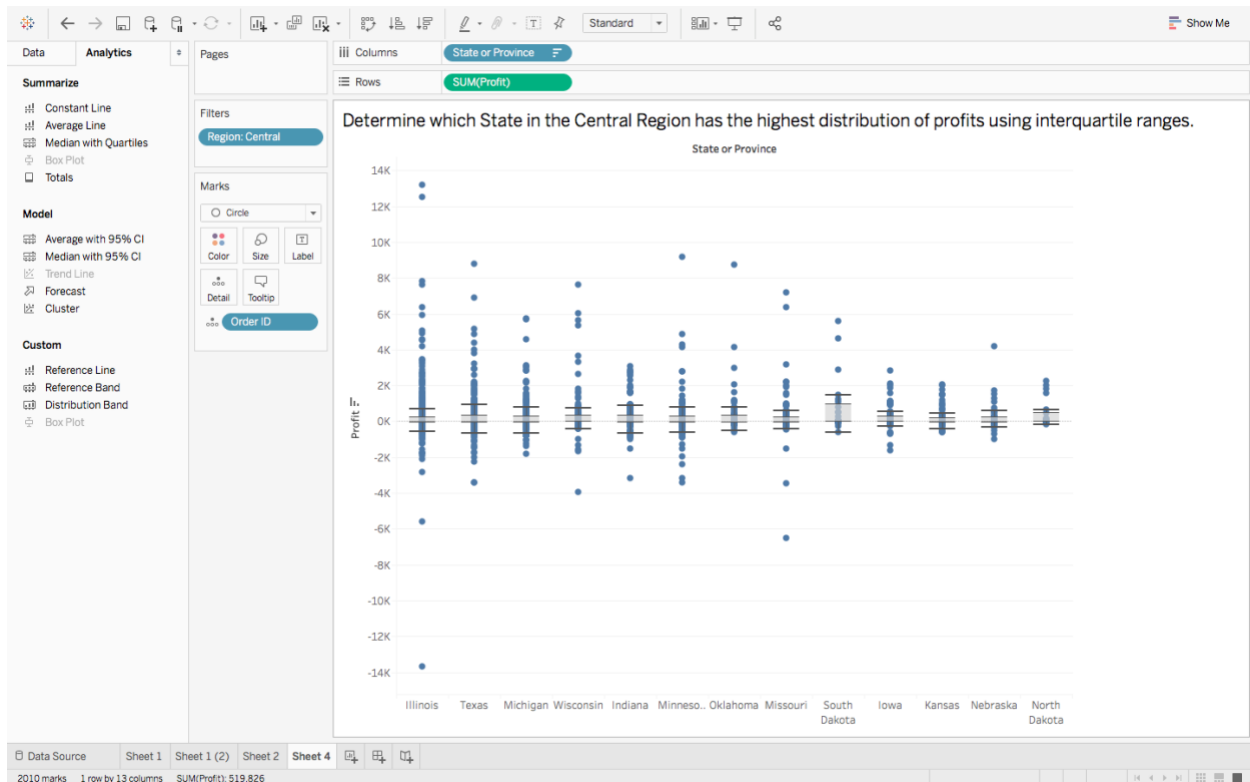
Q5) D



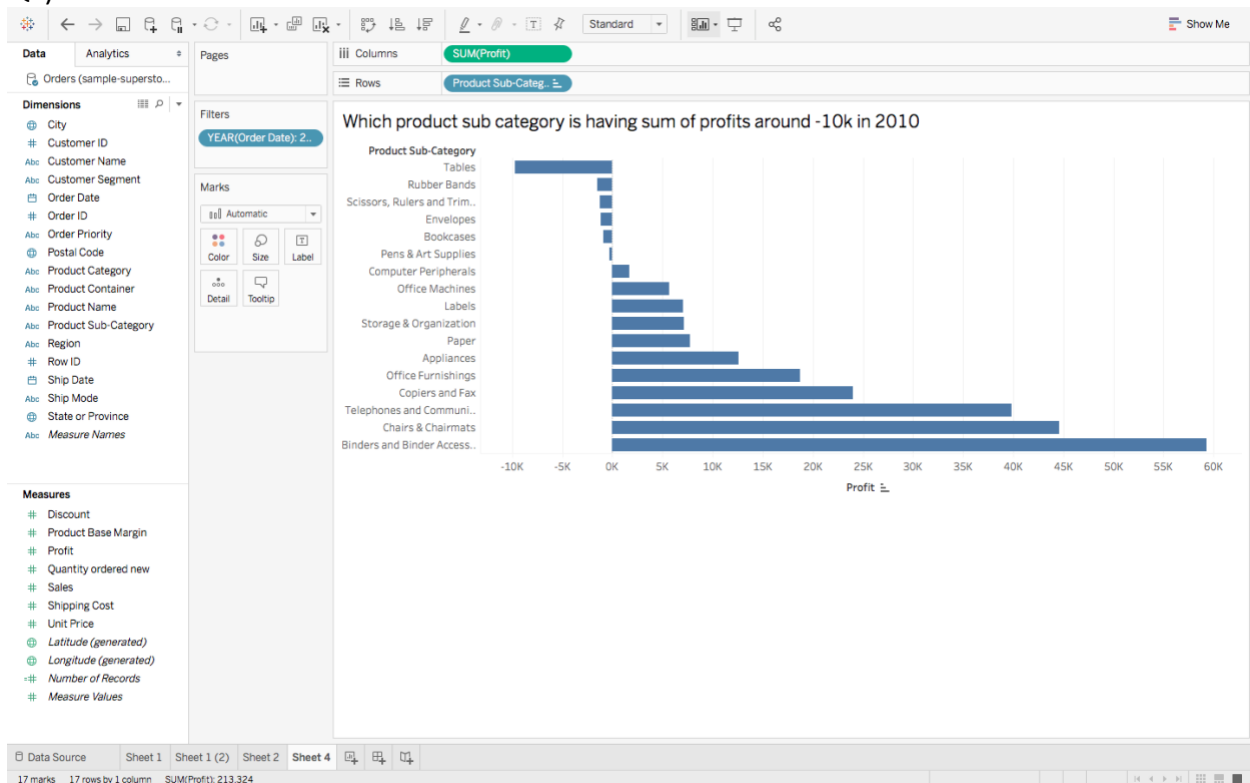
Q6) D



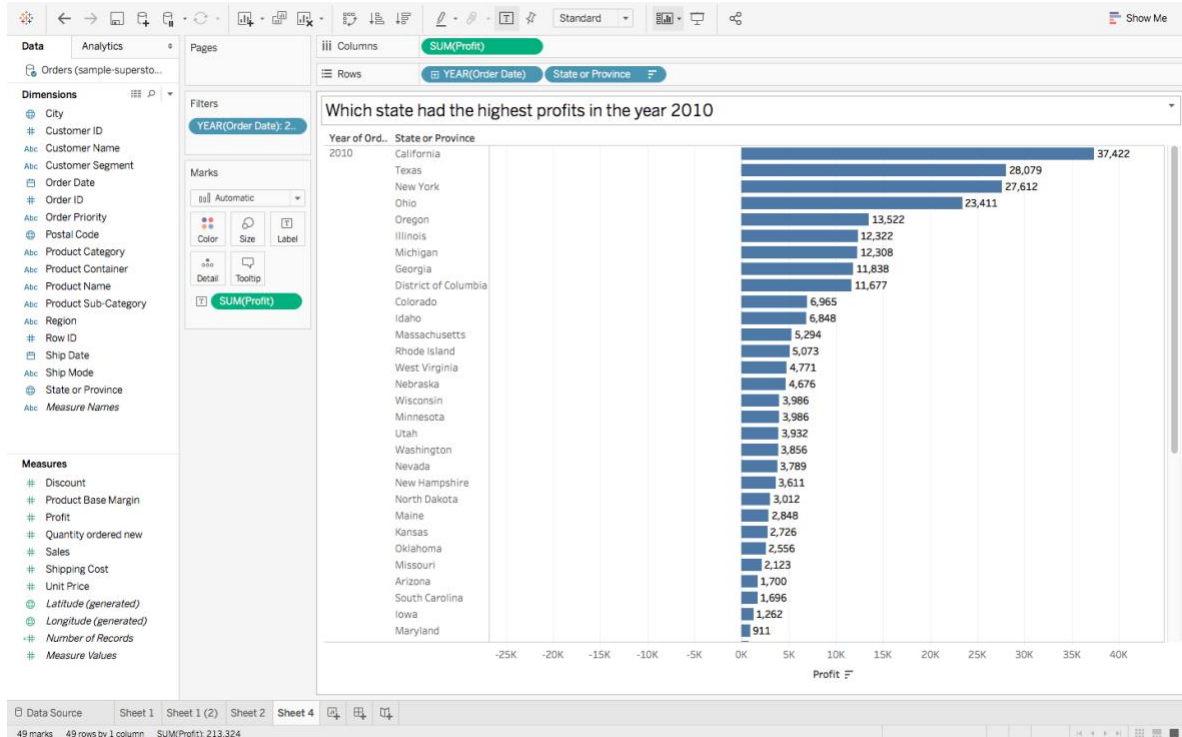
Q7) A



Q8) B

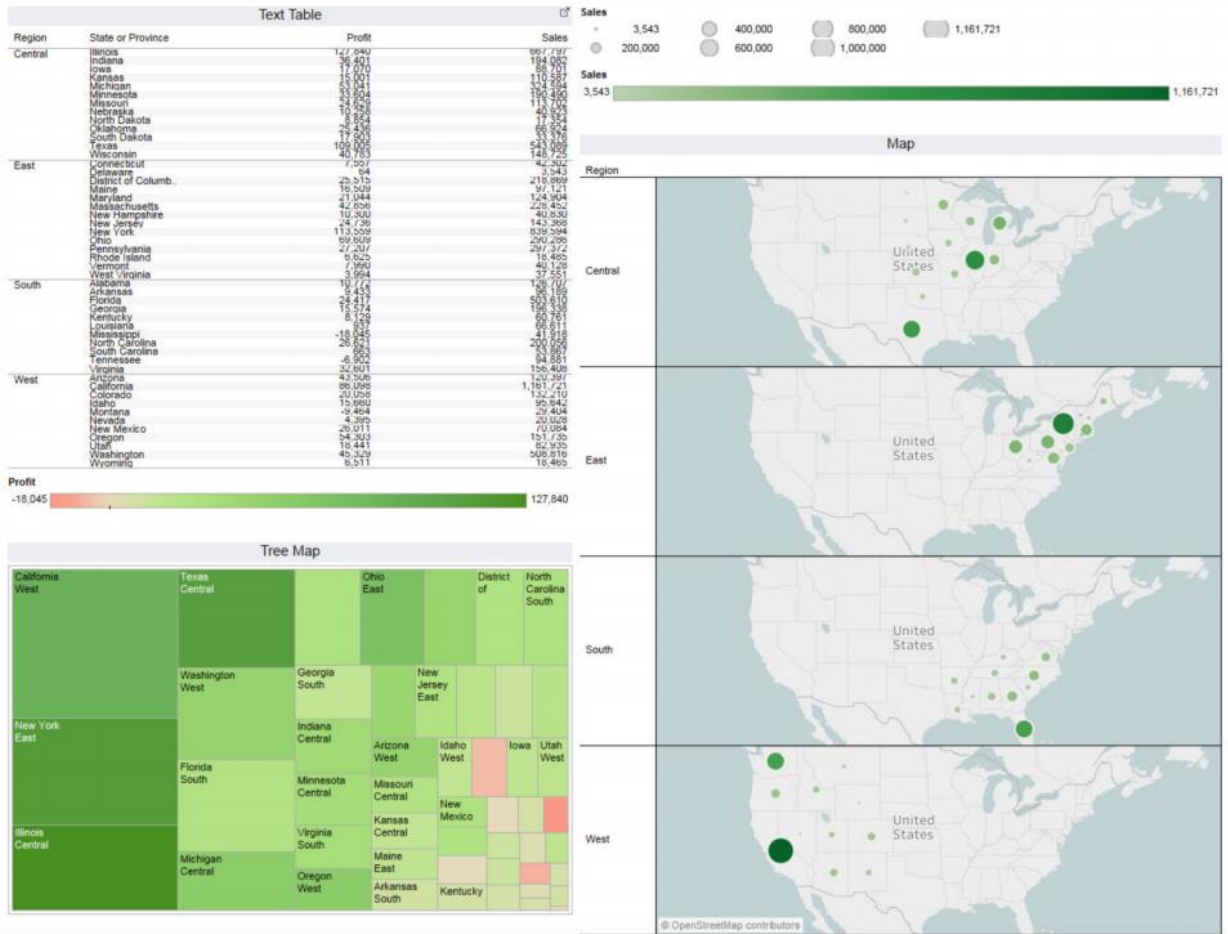


Q9) D



Q10)

A) Your goal is to compare the sum of profit and sum of sales within states across different regions. While each of the views below may be correct, one might be a better choice over another, explain.



The view with the text table provides the good comparison from the three views to compare the sales and the profit across the different regions and states as we can compare the numbers. While it may be verbose and not visual but however provides an accurate method to compare the values.

The tree map view shows the profit as a map with the profit on a color gradient and size shows the data about the sales. But, the states are all mixed up and the region is not apparent. Adding the region as detail in the tree map would sort the regions and help compare the states within a region better.

The third view shows a map with the sales on the color gradient and the size of the circles on the map of US using the latitude and longitude of the states from the dataset. This view gives a very visual representation of the sales of the different states in the different regions. However, it fails to compare the profit and the sales for each state and the map graph is more useful to show the distribution and not compare values.

Out of the three views the treemap shows the best comparison of the sum of profit and sum of sales within states but fails across regions.

B) Build an alternative view and explain why you made any design decisions.

I built a side by side bars view as it helps to achieve the goal the most easily and clearly. We can easily compare the profit and sales in each state with the length of the bars.

This view shows a clear comparison of sales and profit of the states within each region and it easy to understand and interpret.

