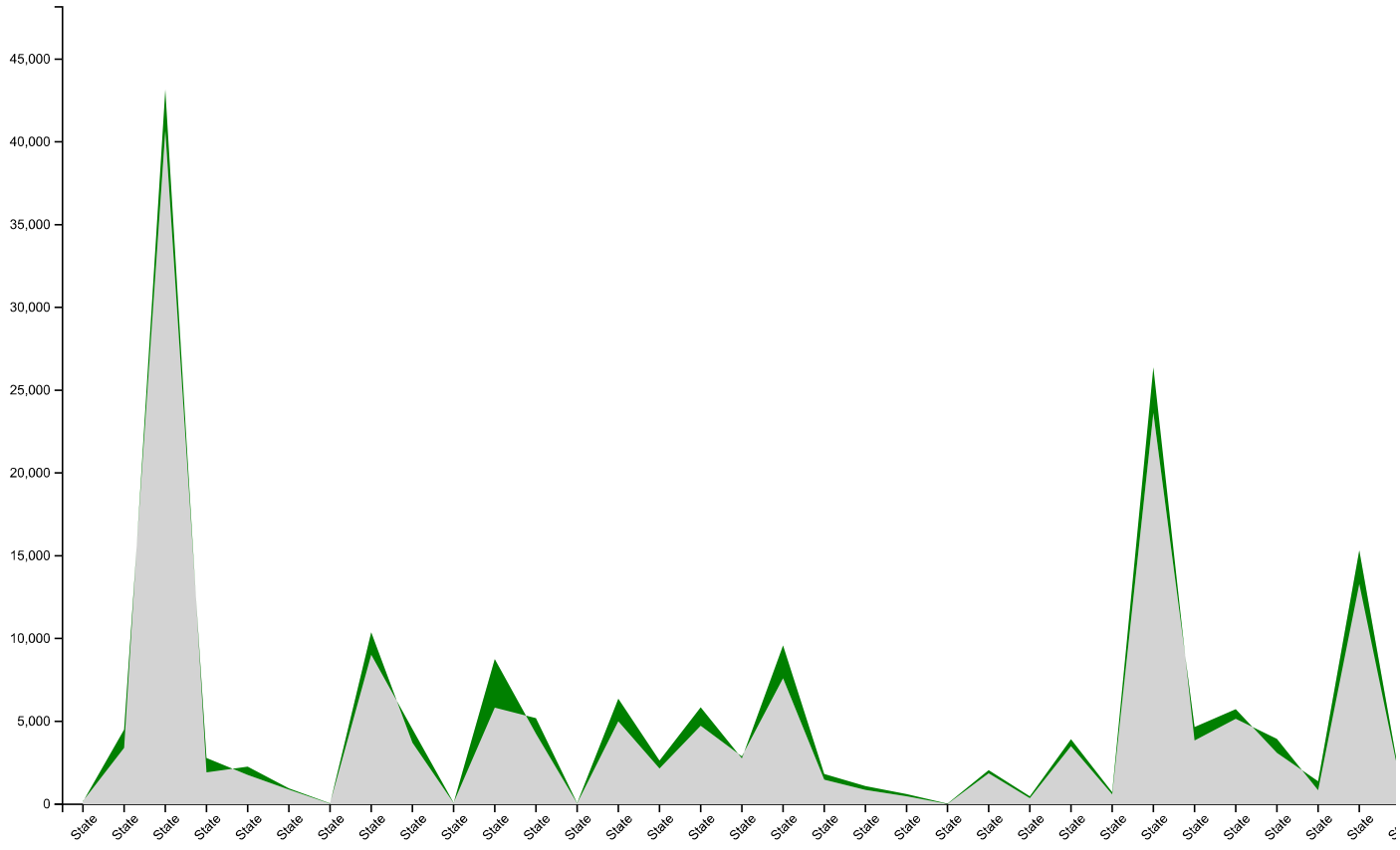
Assignment 7

Data visualization is often used to visualize trends in massive datasets. These visualizations do not provide accurate inference on the numbers but are instead used to infer a specific trend or behavior in the data. In this assignment, we are going to look at different types of visualizations that can be used to visualize trends in e-commerce.

Question 1:

Create a streamgraph to display profit and sales for the Furniture Category after the year 2016 (>2016) for every state. Provide appropriate scale, axes, axis title, plot title and legend for the plot. Associate different colors for profit and sales data points. (Axis and plot title is open ended and not present in the sample_output)

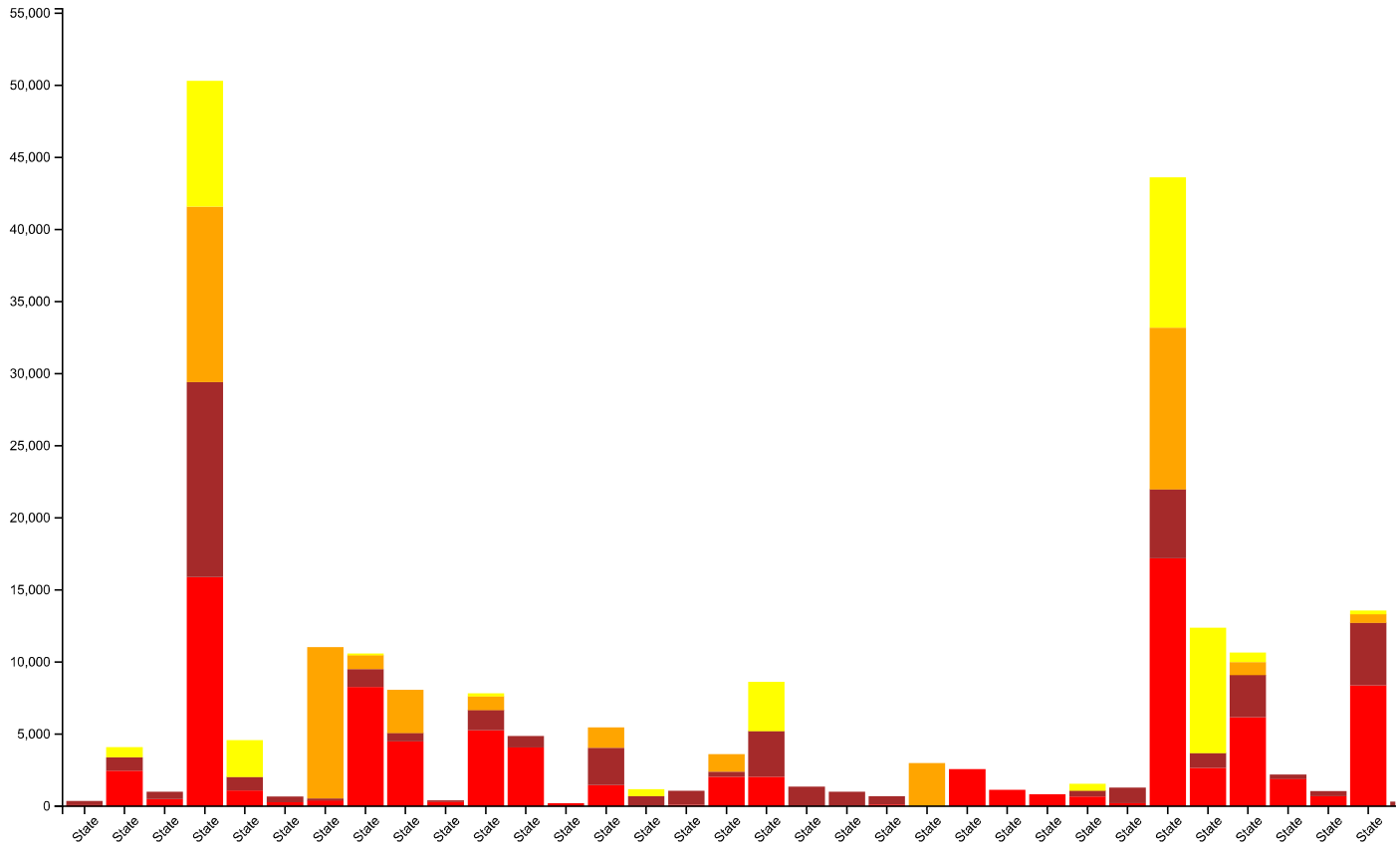
Plot:



Question 2:

Next, we will see how sales are distributed between the sub-categories of the products. For this, you will create a stacked bar plot to display the sales of four sub-categories in the category of Technology after the year 2016 (>2016) for every state. Provide appropriate scale, axes, axis title, plot title and legend for the plot. (Axis and plot title is open ended and not present in the sample_output)

Plot:



Question 3:

Geographical location is a very important factor for many decisions in E-commerce. In this section we will see how the sales are distributed among the states by using a geomap. You have been provided with a symbol converter (stateSym) in app.js and a us-states.json file (feature file to draw a geomap). One observation you will make while creating the geomap is that the variance between the sales values of different states is huge. Due to this the color coding is not consistent. One way to normalize the sales values is to use a log scale. (The sample output follows a log scale). Provide an appropriate legend (Can be log scale/discrete/sequential) and plot title to the chart. You can use external d3 packages or generate it from d3 primitives. (Legend and plot title is open ended and not present in the sample_output)

Plot: