BZAN 535 - HW3 – Due Sept. 14, 2016

1. Go to Tableau.com -> Stories -> Viz Gallery, choose a visualization that is particularly good, and explain what makes this an effective visual. (Don't choose either of the ones shown in class.) Provide a copy of the image and the link for this visual.

2. In HW2, you produced a map based on the locations of Carbo database Kroger stores. Create a map that is a useful visualization. Use "Filled map" as the mark. Define color based on some measure of your choice. Display the map and explain what business-relevant question this map would be useful for.

3. This question involves the Carbo data from dunnhumby. There are four commodities: pasta, pasta sauce, pancake syrup and pancake mix.
    a. How many brands are there for each commodity and how many UPCs are there for each commodity? Show the mySQL query for answering this pair of questions and report the results.
    b. Using Tableau, import the dh_product_lookup file and create a tree map where you categorize first on commodity and then on brand. The measure determining the size of each rectangle is the number of UPCs. Display the resulting image and provide a couple of insights based on this display.
    c. In Tableau, join the table dh_transactions, and create a tree map similar to 3b, but with size based on sum of sales. Copy the image from this sheet and explain how it differs from the tree map in 3b.
    d. Create a dashboard with the sheets from 3b and 3c. Add a filter for commodity. Select only pasta and pasta sauce in the filter (so that pancake mix and syrup disappear) and copy the image.
    e. Show a scatterplot with unit sales on one axis and dollar sales on the other axis. Drag UPC to "Detail," which controls the level of aggregation. Color by commodity. Add product description and product size to the tooltip. Decide whether to make the axes linear or logarithmic. Explain how you might use this visualization in a meeting. Add any other features that you believe will enhance the visualization and its usefulness.