**IST687 – Viz Homework: air quality Analysis**

**Step 1: Load the data**

We will use the airquality data set, that you should already have as part of your R installation.

**Step 2: Clean the data**

After you load the data, there will be some NAs in the data. You need to figure out what to do about those nasty NAs.

**Step 3: Understand the data distribution**

Create the following visualizations:

* Histograms for each of the variables
* Boxplot for Ozone, and boxplots for different wind values (round the wind to get a good number of “buckets”

**Step 4: Explore how the data changes over time**

First, make sure to create appropriate dates (this data was from 1973). Then create line charts for ozone, temp, wind and solar.R (one line chart for each, and then one chart with 4 lines, each having a different color).   
  
Note that for the chart with 4 lines, you need to think about how to effectively use the y-axis.

**Step 5: Look at all the data via a Heatmap**

Create a heatmap, with each date along the x-axis and ozone, temp, wind and solar.r along the y-axis.

Note that you need to figure out how to show the relative change equally across all the variables.

**Step 6: Look at all the data via a scatter chart**

Create a scatter chart, with the x-axis representing the wind, the y-axis representing the temperature, the size of each dot representing the ozone and the color representing the solar.R

**Step 7: Final Analysis**

* Do you see any patterns after exploring the data?
* What was the most useful visualization?