Project 1
Due: Friday, Jan 30th 5pm

Project should be turned into the stat 67 box (DBH 2nd floor).

Download the countries data set from the class website and use it to answer the following questions. For each question, show a graphic with text near the graphic. Do not attach all the graphics at the end. Label your graphics with figure numbers and refer to them. Describe graphics and statistics with complete sentences. Example of a poorly done and well done project can be seen on the website.

1. Calculate summary statistics and a statistical graphic appropriate for any numeric variable. Explain what the graphic and the statistics mean in the context of the variable.

2. Turn your variable into a categorical variable using the cut function (you may also want the quantile function). You may name your categories with words (eg. high, medium, low) or as ranges. Choose what you feel is an appropriate number of categories. Calculate summary statistics and a statistical graphic appropriate for the categorical variable. Explain what the graphic and the statistics mean in the context of the variable.

3. Choose any two categorical variables and create a statistical graphic showing their relationship. Explain what the graphic means in the context of the variables.

4. Choose any two numeric variables and create a statistical graphic showing their relationship. Explain what the graphic means in the context of the variables.

5. Choose any categorical variable and any numeric variable. Create a statistical graphic showing their relationship. Explain what the graphic means in the context of the variables.

6. For the following questions we will be interested in the variable ”StateOfPeace”.
   (a) Create a new variable which is the ratio between primary school completion rate for boys and girls.
   (b) Create a graphic showing the relationship between primary school completion ratio and State of Peace.
   (c) Describe the relationship between primary school completion ratio and State of Peace.
   (d) Can you say that having more girls complete school will create a more peaceful society?

7. Create a single graphic which shows something about this data set. Describe what the graphic tells us. You may use as many or as few variables as you’d like, they can be categorical or numeric, you may use outside data to supplement this data, and you may combine variables.