Econ 510 Topics in Environmental and Resource Economics
Fall MMXVII

Homework 2
(due Thurs 9 Feb by 17:00 in the Blackboard folder)
***Homeworks should be written up in R markdown, then knitted into html files (button
at the top of the code window) and then submitted through the Blackboard
assignment. Don't give me the R notebook, just a knitted html.***

Import the quality data. Then do the following. You can pipe steps as you see fit as long as it is
clear what you are doing at each stage.

1. Cut the data down to only the variables unitid, year, public, treat, tgroup, rsalt, rinc, rtufe,
   diplomas, and satscale75

2. Rename the following variables

   - treat $->$ signACUPCC
   - tgroup $->$ signatory
   - rsalt $->$ AvgProfSalary
   - rinc $->$ MedStateInc
   - rtufe $->$ Cost

3. Eliminate any observations with missing values.

4. Produce a graph, similar to the one we did in class, showing average 75th percentile SAT
   scores (satscale75) for each year for public and private schools on the same graph. Change
   the data so that the legend on the side reads "public" and "private" rather than 0 and 1.
   Also, change the label on the y-axis to be "SAT scores." And put a nice title on the graph,
   eh?

5. NOW, produce a similar plot, but showing average SAT scores for each year for signatory
   and nonsignatory schools on the same graph. (.i. separate the data by whether the school
   was a signatory rather than by the type of school. Savvy?)

6. Now, see if you can produce a faceted graph (use **facet_wrap**) showing this signatory/non-
   signatory plot separated by public and private schools. (Note: At the time of writing this, I
   have not tried to accomplish this. But anything CAN be done, it is just a matter of how to
   do it. But whether ggplot2 makes this simple, I do not know at this time.)