Stat 404
Lab1
28 August 2015

All files and data will be published on the class website on the Lecture page.
www.webpages.uidaho.edu/~renaes/Stat404home.html

Lab collection:
If I decide to collect a lab, I will let you know at the beginning of the lab and it will be due within 1-2 class periods of the lab.
What to copy and paste into the document for submission:
All code from both programs and the log window from SAS (please clean it up a bit and get rid of errors if there are any). Do not paste the results from either program unless I specify in the exercises.

Submission:
Is through BbLearn. Go to the Labs link, click on the lab and follow instructions to attach the file. The file MUST be in PDF format. No other formats will be allowed for submission. The easiest way I find to create a PDF is to do all the work in Word or Pages then "save as" and choose PDF format.

One recommendation I have is to create a few folders on your computer for this class. I would create R, SAS, Data, Labs. That way you can save all the files and data you need for labs and it will make things easier for later labs.

SAS

1. **Creating a program, printing results**
    a. Create a program (lecture 2 (8/26) has examples) with the following data: {1, 5, 6, 3, 4, 5, 6, 10, 12}
    b. Use PROC PRINT to see the data in the results window that will open. Here is some example code to use:
    PROC PRINT data=sasdataset;
    RUN;
    c. Make sure the data is correct.
2. **Creating a program, printing results, checking the log**
    a. Go to the class website Lecture page and save the file called "airquality.csv" to your computer (in the folder I suggested above).
    b. Open the data file. It is a csv and will open in Excel or an equivalent spreadsheet program.

c. You need to create a SAS program and paste the data under the CARDS or DATALINES statement. Make sure that the header row (the first row with the variable names) is not copied into this portion. The program needs the DATA step and PROC PRINT.
d. Check the log. How many variables are there? How many observations?

R

1. **Creating a program, printing results**
    a. Create a variable (vector) with the following data (you can call it whatever you want) and run the code: {1, 5, 6, 3, 4, 5, 6, 10, 12}
    b. Make sure the data is correct.
2. **Creating a program, printing results, checking the** log
    a. Go to the class website Lecture page and save the file called "airquality.csv" to your computer (if you have not done so already for the SAS portion of this lab).
    b. Open the data file. It is a csv and will open in Excel or an equivalent spreadsheet program.
    c. In RStudio, go to the Environment tab in the upper right window. Click on Import Dataset and choose From Text File. Navigate to the location of airquality.csv and choose it to open. From there, make sure the Heading selection is Yes and Separator selection is Comma.
    d. Now in that same window of RStudio, note that the dataset "airquality" is listed there with a bit of information. How many observations and variables are there?