**CLDP 944 Homework 1: Make Friends with SAS (8 points)**

**Due 9/8/17 by 11:59 PM via Blackboard  
*Please name your .sas file as follows: CLDP944\_Firstname\_Lastname\_HW1.sas***

You have been given two datasets from a study examining the relationships among marital satisfaction and career satisfaction across 4 occasions in different-sex couples. Time 2 was collected at 3 months, Time 3 at 12 months, and Time 4 at 24 months. You have been given two datasets, each in multivariate format. The first dataset is *husband.sav* (SPSS data file) and contains the following:

*FamilyID: family ID number*

*WedTime: how long couple had been married at start of study*

*HMarSat1 – HMarSat4: husband’s marital satisfaction at each of 4 occasions*

*HCarSat1 – HcarSat4: husband’s career satisfaction at each of 4 occasions*

*HAge1 – HAge4: husband’s age at each of 4 occasions*

The second dataset is called *wife.xls* (excel sheet) and has the same variables but with a “w” in front for marsat, carsat, and age.

Your task is to generate the syntax in SAS to do the following.   
**Use comments at each step—these instructions can be copied in as comments to do so.**

* Define a SAS library and placeholder macro variable (i.e., like “filepath”) for the data location called “Friends”. Import both files in the work library, naming them “Husbands” and “Wives”.
* Merge both files together by FamilyID (sort by FamilyID first) into a dataset called “FamilyMult”.
* Create a **single stacked dataset** called “FamilyStack” with six new variables: husband martial satisfaction, husband career satisfaction, husband age, wife martial satisfaction, wife career satisfaction, and wife age. Use the stem of the variable name as the new stacked variable name. **Then create a sequential index (ranging from 1-4) called “occasion”, and create a second index for time in years since Time 1 called “year” (using actual years passed, as given above).** Create **variable labels** for every new variable. Remove (drop) the original 24 multivariate variables that are now stacked into 6 new variables. Note: an ARRAY will save you some typing.
* Print descriptive statistics (mean, SD, minimum, and maximum) for wedtime, husband’s age, and wife’s age overall and by occasion. Add a title of “Descriptive Statistics for [Firstname Lastname]”. You do NOT need to create any new variables for this—you are asking for output only. Use ODS HTML to tell SAS to **save this output** as an excel file called “[Firstname Lastname] SAS output.xls”.
* Then **create two new variables** in which the sample mean age is subtracted from the original age variable for each (i.e., called hage\_c for husbands and wage\_c for wives). Create **variable labels**.
* Also **create a new categorical variable** that rounds age into rounded 10-year intervals for both husbands (Hage\_r) and wives (Wage\_r). (Hint: use a function). Create **variable labels**.
* Write syntax to save your completed SAS dataset to a permanent SAS dataset called *Lastname*.
* Submit your completed SAS syntax file (.sas) via Blackboard. I do not need the other files, but you should check them carefully to make sure that all commands were executed properly.

\*\*\* TIP: Make sure you check the log and output windows carefully! Anything in red is bad. Clear the log between steps to make it easier to keep track (CNTRL+E). If you open the dataset in the explorer window to make sure everything looks ok, remember to **close the dataset between steps** or SAS will complain.