**Homework Week 1**

1. The SAS data set sales is in the s5066/prg1 sub-directory on the SAS cloud.
   1. Define a library name mac1 that points to the correct subdirectory on the SAS cloud.
   2. Write a program to display the descriptor portion of this data set.
2. The SAS data set fram40 is in the fram subdirectory on the SAS cloud.
   1. Create a library fram that points to the directory containing the data set fram40.
   2. Use a DATA step with the data set fram.fram40 to create a temporary data set work.lipids that meets the following requirements.
      1. Females only (the variable sex must have the numeric value 2)
      2. The numeric variable Age11 must be between 60 and 69 (inclusive).
   3. The data set work. lipids should contain only that variables id, age11, hdl, and ldl. Rename the variable age11 to be age.
   4. None of the variables for any observation on work.lipids should have a missing value.
3. The SAS data set framexam5subset is in the fram subdirectory.
   1. Use a single DATA step with this data set to create two new data sets work.males and work.females.
   2. Output records for which the numeric variable sex has the value 2 to the data set work.females. Otherwise output the record to the data set work.males.
   3. Create a new variable mnsbp, that is the average of the values in sbp1, sbp2, and sbp3. Use the correct SAS function to calculate the average of these variables so that all available known values of the three variables is used.
   4. Both datasets should contain only the variables id and mnsbp.
   5. Print the first 7 observations of work.males and the first 6 observations of work.females.
4. The SAS data set fram40 is in the fram sub directory.
   1. Create a library using the libname fr
   2. Use a DATA step to read fr.fram40 and create a new data set, work.bptmp, that contains only the variables id and the 20 variables containing systolic blood pressure determinations. The available systolic blood pressure determinations are in the 20 variables spf1, spf2,...,spf20.
   3. Create an array, s, to access spf1 through spb20 using a SAS variable list construction.
   4. Use a DO loop to create a variable numsbp that contains the number of non-missing blood pressures for each observation on the dataset.
   5. Use a PROC PRINT step to display the first 25 records on the data set work.bptmp
5. The data sets adultdemographics1 and mortality are in the Nhanes3 subdirectory. Both of these data sets contain the variable seqn, the primary key (all participants have a unique seqn)
   1. Use these data sets to create three new data sets work.nh3tmp work.mortonly, and work.adultonly.
   2. work.nh3tmp should contain records that are on both adultdemographics1 and mortality.
   3. work.mortonly should contain records that are on the mortality file but not on the adultdemographics1
   4. work.adultonly should contain records that are on the adultdemographics1 file but not on the mortality file.
   5. Use three PROC CONTENTS steps to examine the number of records on the three files work.nh3tmp work.mortonly, and work.adultonly and verify that work.adultonly has no records.