**MAT 7500 – Spring 2017**

**Practice Problem for SAS Lecture 2**

**Problem 1**: Type in the following program regarding meeting times, locations, etc.

1. Read in the data from the following two files from the student data.xlsx sheet.
2. Print out all lines from the first file where the first name begins with S.
3. Merge the two files together by the name.

**Problem 2**: Using the same data from problem 1

1. Create a new race/ethnicity variable so that anyone with RaceEthn starting with w, W, c, or C is “White”.
2. Create two datasets, one of all Whites (or Caucasians) and one of all other races, using a single data step and multiple output statements

**Problem 3**: Using the same data from problem 1,

1. merge the files together, this time creating a variable called *source* that is equal to “only A”, “only B”, or “both files” based on the source of the data.
2. Produce a frequency table of the *source* variable.

**Problem 4**: Generate simulated data on weight vs. height for men.

1. Generate 100 observations for height in inches for men from a N(70,2.5) distribution
2. For each one, make weight = -202 + 5.26 \* height (on average)
3. Add a random term to each one that comes from a N(0,27) distribution
4. Create plot of the data (using proc plot; plot weight\*height;)