

STAT 540: Homework 4

In completing the homework, you should work with the data as imported from Excel; do not make changes in Excel itself to simplify your SAS coding.

1. The attached Excel file contains counts of fish collected using electro-shock equipment at each of 3 lakes for each of 3 months.
 - (a) Transpose the data set so that “Species” and “Count” are listed as variables for each combination of Lake and Month; be sure the variable names, etc are attractive.
 - (b) Construct a frequency table for Largemouth Bass counts in the 3 lakes.
 - (c) Graduate students should re-transpose the data.
2. The Excel worksheet contains three worksheets. The first two data sheets contain information on patient beds at Palmetto Richland and Palmetto Baptist hospitals. The third worksheet contains information on the number of beds occupied at both Palmetto Richland and Palmetto Baptist for each day of the week of September 1, 2007. Import all three worksheets separately into SAS.
 - (a) In SAS, create a “Hospital” variable (set to Richland or Baptist, depending on the data set) for the first two data sets; it will simplify your work later on.
 - (b) Read the first two files into a common data set, sorted by the number of beds.
 - (c) In SAS, create a data set with only the September 2, 2007 occupancy records, and merge this data set with your earlier data set by Hospital and Unit.
 - (d) Compute the occupancy rate for each combination of hospital and unit (occupied beds by total number of beds) for the data set you created in (c). Print the data set with nice labels, title, etc.
 - (e) Print the unit with the lowest occupancy rate for the data set you created in (c).