**Stata Programming Homework**

Use the Ischemic Heart Disease dataset (see “Stata Graphical Displays” lecture for dataset).

1. Generate a new cost variable: logcost= log(totalcost+1)

2. Create a local macro that represents the covariates age and gender. Perform a regression of logcost on age and gender using your local macro.

3. Using a ‘forvalues’ loop, generate a categorical age variable (agecat) that takes values 20, 40 and 60 where agecat = 20 if age>20 & age≤40; agecat=40 if age>40 & age≤60; agecat=60 if age>60 and age≤80.

### 4. Extra credit: using the agecat variable in question 3 and using the ‘levelsof’ command and a ‘foreach’ loop, perform regressions of logcost on ervisits for each level of agecat. Note that the regressions should occur within the foreach loop. Hint: see “Looping over Values and levelsof” at <http://www.ssc.wisc.edu/sscc/pubs/stata_prog1.htm>

###