**Exercise 1: Multiple Regression**

Open the datafile, states.dta.

1. Select a few variables to use in a multiple regression of your own. Before running the regression, examine descriptive of the variables and generate a few scatterplots.
2. Run your regression
3. Interpret the intercept, slopes, R2, and the overall significance of the equation
4. Test the assumptions of normality and homogeneity

**Exercise 2: Regression, Categorical Predictors, and Interactions**

Open the datafile, states.dta.

1. Add on to the regression equation that you created in exercise 1 by generating an interaction term and testing the interaction.
2. Try adding a categorical variable to your regression (remember, it will need to be dummy coded). You could use region or high25, or generate a new categorical variable from one of the continuous variables in the dataset.
3. Generate and save estimates from three regression models. Try exporting your results into Excel. Use “help outreg” to view different options for formatting of Excel results.