Assignment #2

DUE: November 12th before class (1:00 PM)

You may use either STATA or R to complete this assignment. Please submit your STATA or R output along with your assignment. In STATA this can be done by creating a .log file, and in R can be done by using the `sink()` function. On the first line of your code after the .log or sink() has been inputted please also include the following:

In STATA:
```
display "`c(username)'"
```

In R:
```
name <- Sys.info()
name[7]
```

Using data derived from dataset 1 in the Assignments folder on Quercus, to carry out the analysis described below.

1) For questions 1 and 2 from assignment #1, run a log-log form, a linear-log form and a log-linear form of the regressions and discuss the results. [10 marks]

2) Can you compare the R-squared values from the linear-linear models in questions 1 and 2 from assignment 1 to their corresponding log-log, linear-log and log-linear versions in question 1 (above)? [5 marks]

3) For the cases carried out in question 1 (above), and the linear-linear case, save the predicted values of the dependent variables, find the means of these series and compare them to the means of the series of the dependent variables. Are they larger or smaller? Discuss. [10 marks]

4) In the cases where the dependent variable in the regression was in log form, take the anti-log of the mean (using the natural anti-log and the "corrected" anti-log) of the predicted value of the logged dependent variable and compare it to the mean of the original levels of the dependent variable. Discuss. [10 marks]

5) In the cases where the regression dependent variable was in log form, plot (i) the two anti-logged predicted values (both the natural and corrected anti-logged predictors derived from the previous question) and (ii) the actual value for female life expectancy at birth against the explanatory variable in the model. Discuss. [5 marks]

The assignments must be submitted on Quercus in both MS word and .pdf formats at or before 13.00 on the dates indicated in the outline. Late assignments will be penalized at the rate of 10% per day