**INSTRUCTIONS**

Every learner should submit his/her own homework solutions. However, you are allowed to discuss the homework with each other– but everyone must submit his/her own papers; you may not copy someone else’s.

The homework consists of one part:

1. Partially replicate the regression homework in R.

Follow the prompts in the attached R script. Answer the bellow questions as best as you can.

**Submission:** Send in both your R program and the word document. (You can copy your code at the end of your word document as well.)

***Good luck!***

**Questions:**

1. Copy your results for model2 (or model2b): make some observations about your model2 output (Compare them to the full model (model1))
   1. How many variables are significant,
   2. What is your adjusted R-squared compared to the full model, in general, do you think your model is better etc.?
2. Copy your ANOVA output. What can you tell about the results?
3. Compare the full model and reduced model for multicollinearity, what are your observations?
4. Copy the plots for the assumptions and compare the results for the reduced and the full model (e.g. did your plots improve?)
5. Compare the stepwise selection methods. What did you notice?
6. In general, comparing the process for regression analysis in Python and R, which one did you like better and why?