WAYNE STATE UNIVERSITY | ECONOMICS DEPARTMENT
ECO5100: INTRODUCTORY STATISTICS AND ECONOMETRICS | EXTRA CREDIT

DUE 8/1

Instructions:

Make sure you report all code and results.
For all questions, write out a fitted model with coefficients, standard errors, R^2 / adjusted R^2, and number of observations.

1. **Estimating wage model (wage.csv)**
   a) Estimate the effects of education, experience, tenure, married status, race (whether the worker is black or not), regional characteristic (whether the worker is from the south or not), as well as whether the worker lives in a city or not (urban variable), on log(wage). *Make sure you model experience and tenure in quadratic form, as discussed in class.*
   b) Interpret the marginal effects of 10th year of experience, and 10th year of tenure on log(wage).
   c) Interpret the effects of race, regional and city dwelling characteristics.
   d) Extend your original model by allowing wages to differ across four groups of people: *married and black, married and nonblack, single and black, and single and nonblack (think about which variable is omitted/default).* What is the estimated wage differential between married blacks and single nonblacks?