Homework 10. Due Wednesday November 20th.

1. Using the program Econ8331_IV.m, answer questions 8.10 and 8.11 in Davidson-MacKinnon.

2. Monte Carlo study. Simulate a linear model for a variable y with one exogenous regressor x and one endogenous regressor w (a linear function of one or more instruments z and an error term in the x-equation correlated with the error term in the $y-$equation. Make the instruments weak (the coefficient to the instrument is small relative to the error variance). Try to use one instrument in generating the endogenous regressor or more instruments that are more weak.

Estimate the coefficients using OLS, standard IV, and LIML. Plot (or show percentiles for) the distributions of the coefficients to the endogenous regressor.