Comp Econ Homework Set 5

Date 4th March 2016

Due Date: 11th March 2016

Repeat exactly the exercise in homework set 4, but now in Julia. To estimate the bias at each (α, n) pair, take the average over 10,000 simulations (that is, generate 10,000 time series, estimate α each time, and then average).

Using IJulia, include your code in a Jupyter notebook that displays the resulting figure in the browser, as well as the time elapsed. In measuring the time elapsed, include only the time it takes to generate all the data (that is, the estimate of the bias at every (α, n) pair). You don't need to include the time it takes to generate the figure.

Try to optimize your code. (With a small amount of tweaking and only a limited knowledge of Julia, I get 20 seconds on my five year old Intel i7-3770 CPU @ 3.40GHz.)