Homework 1. Due Wednesday February 2.

You are welcome to do the homeworks together. In particular, it makes sense to use the same data. But write your own comments. I assume you use Matlab, but R or GAUSS or what not is OK. But not packages like Stata where you push a button (although you might want to compare to what that gives you).

1. Download 3 series from the BEA or whatever and run a VAR(2). Choose an ordering and plot some IRFs.

2. Consider the VAR(2).

$$\begin{pmatrix} x_{1t} \\ x_{2t} \end{pmatrix} = \begin{pmatrix} 1 & 0 \\ 2 & 3 \end{pmatrix} \begin{pmatrix} x_{1t-1} \\ x_{2t-1} \end{pmatrix} + \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \begin{pmatrix} x_{1t-2} \\ x_{2t-2} \end{pmatrix} + \begin{pmatrix} u_{1t} \\ u_{2t} \end{pmatrix}$$

Using recursive substitution, find the first two or three impulse responses by hand, or simulate in Matlab and show a few more.