FA542 - Final Exam

I pledge my honor that I have abided by the Stevens Honor System.

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Problem 1 (50pt)

Suppose that the daily log return of a pair of securities follows the following model:

$$\begin{cases} r_{1,t} = -0.05 + 0.1r_{1,t-1} + 0.05r_{2,t-1} + a_{1,t} \\ r_{2,t} = 0.1 - 0.1r_{1,t-1} + 0.3r_{2,t-1} + a_{2,t} \end{cases}$$