Assignment 3

1. Become familiar with the System-on-Chip Environment (SCE)
    - Setup
        - Note that we will use the 2004 version of SCE for the tutorial:
        - `source /opt/sce-20041007/bin/setup.csh`
        - `rm -rf ~/.sce`
        - `mkdir demo`
        - `cd demo`
        - `setup_demo`
    - Open the SCE Tutorial document
        - `acroread SCE_Tutorial/sce-tutorial.pdf &`
        - To protect the environment and save some trees,
          please *do not print* the tutorial document!
          It contains 250 pages and you will likely read it only once… ;-)
    - Follow the SCE Tutorial instructions
        - `sce &`
        - `...`
    - Cleanup
        - When done (or to start over), clean up your demo directory
        - `cd ..`
        - `rm -rf demo`

Assignment 3

2. Simulate your JPEG Encoder model in SCE
   - Setup
     - Note that we will use the 2008 version of SCE for the JPEG Encoder:
     - `source /opt/sce-20080601/bin/setup.csh`
     - `rm -rf ~/.sce`
     - `cd jpegencoder`
     - `sce`
   - Create a new project in SCE
     - `Project->New`
     - `Project->Settings`
       - Set verbosity level to 3 and warning level to 2
       - Adjust any other options the compiler may need to compile your model
     - `Project->SaveAs "jpegencoder.sce"`
   - Load your design model into SCE
     - `File->Import "jpegencoder.sc"`
     - `Project->AddDesign`
     - Right-click on `jpegencoder.sir` in the project window, and `Rename` the model to `JPEGencSpec`
   - Compile and simulate your model in SCE
     - `Validation->Compile`
     - `Validation->Simulate`

Assignment 3

3. Analyze your JPEG Encoder model in SCE
   - Setup
     - …continued from step 2 (previous page)
   - View the structural hierachy chart
     - Select the `Main` behavior in the behavior browser
     - Right-click `->Chart`
     - Double-click the chart to add a level of hierarchy
     - `View->Connectivity`
     - `...`
     - `Window->Print…` to file `"jpegencoder.ps"`
- Deliverables
  - SpecC source file
    - `"jpegencoder.sc"`
  - Hierarchy chart
    - `"jpegencoder.ps"`
- Due
  - by Friday, Oct 24, 2008, at noon
  - by email to `doemer@uci.edu` with subject "EECS222C HW3"