CSCI 254: *Introduction to Computer Organization*
Homework 2 (revised), 3, and 4

This good news is that you have an extra week to work on one-half of Homework 2.

Homework 2 -- Due February 15

From the problems for Chapter 2 (pp. 63-65).

Problem 2-3.
Problem 2-12.
Problem 2-19.
Problem 2-20.
Problem 2-23.

Homework 3 -- Due February 22

From the problems for Chapter 3 (pp. 89-91).

Problem 3-1.
Problem 3-3.
Problem 3-9.
Problem 3-13.
Problem 3-18.
Problem 3-20.

Homework 4 -- Due March 1

Design a sequential circuit with an input *x* and an output *z*. Your circuit should only output 0's on *z*, until it receives two 1's on *x*. From then on, your circuit should only output 1 on *z* . For example, if the *x* input is:

001001100010010

the *z* output should be:

000001111111111

Your state machine and circuit should look a *lot* like the ``divide by three" state machine and circuit shown in class. Once you have designed your circuit, simulate it using `diglog`.

You may work on this homework in teams of up to three people.