

CS 61A Lecture Notes Second Half of Week 8

Topic: Review

Reading: No new reading; study for the final.

- Go over first-day handout about abstraction; show how each topic involves an abstraction barrier and say what's above and what's below the line.
- Go over the big ideas within each programming paradigm:

Functional Programming:

- composition of functions
- first-class functions (function as object)
- higher-order functions
- recursion
- delayed (lazy) evaluation
- (vocabulary: parameter, argument, scope, iterative process)

Object-Oriented Programming:

- actors
- message passing
- local state
- inheritance
- identity vs. equal value
- (vocabulary: dispatch procedure, delegation, mutation)

Logic Programming:

- focus on ends, not means
- multiple solutions
- running a program backwards
- (vocabulary: pattern matching, unification)

- Review where 61A fits into the curriculum. (See the CS abstraction hierarchy in week 1.)

Please, please, don't forget the ideas of 61A just because you're not programming in Scheme!