Case Study
The Water Pouring Problem
States and Moves

Glass: Int

State: Vector[Int] (one entry per glass)

Moves:

- Empty(glass)
- Fill(glass)
- Pour(from, to)
Variants

In a program of the complexity of the pouring program, there are many choices to be made.

Choice of representations.

- Specific classes for moves and paths, or some encoding?
- Object-oriented methods, or naked data structures with functions?

The present elaboration is just one solution, and not necessarily the shortest one.
Guiding Principles for Good Design

» Name everything you can.
» Put operations into natural scopes.
» Keep degrees of freedom for future refinements.