Context-aware functions
Who cares about context?

- Say we want to "integrate" a sequence:
  - Given: [1,1,0,2,1]
  - Return: [1,2,2,4,5]

- How can we implement this?
- How fast is our program?
- Can we do any better?
Recipe for accumulators

- It's an "add-on"
  - First develop function as usual
  - Then, study it to see how it can be improved
    - How can an accumulator help?
    - Introduce a local function declaration
    - Study accumulator invariant

- Examples, anyone?
Examples

- Some simple ones
  - Reverse a list
  - Add elements of list
  - Measure height of a tree
- What's the invariant?
  - Don't miss today's lab!