

## CS314 HANDOUT, MARCH 1

**Questions for today.** Think about these questions and maybe take notes on them.

(1) In the following LETREC program, what are the scopes of `add` and `sum`?

```
let add = proc (x) proc (y) -(x,-(0,y))
in letrec sum (i) = if zero?(i) then 0 else ((add i) (sum -(i,1)))
in (sum 10)
```

In what environments are the expressions `proc (y) -(x,-(0,y))` and `(sum -(i,1))` evaluated?

(2) What is the difference between a memory location and a register?