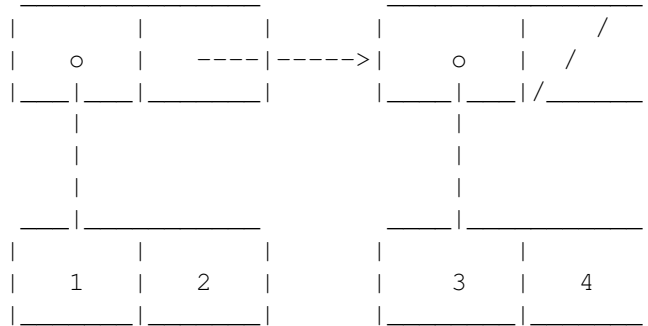


CSE 341 — Scheme dynamic scoping, improper lists, quasiquote

Discussion Questions

1. Draw a box-and-arrow picture for the value of `(squid . (clam . (octopus . ())))`
2. How would you write the following list structure in Scheme?



3. Given the following Scheme code:

```
(define n 0)

(define (get-n) n)

(define (squid) (get-n))

(define (octopus n) (squid))
```

what does `(squid)` evaluate to? What does `(octopus 8)` evaluate to? What would be the result in a dynamically scoped version of Scheme?

4. What is the value of `x`, `y`, and `z` after evaluating the following?

```
(define x `(clam))

(define y `(keep ,x))

(define z `(keep ,@x))
```