CSC-151

Monday October 27

Fall 2025

AGENDA

1. Announcements
2. Reading Review
3. Lab
4. Wrap-up

ANNOUNCEMENTS

- Welcome back!
- No quiz on Wednesday
- Now might be a good time to work on coding challenge revisions

CS Department Events

CS Table

- Tuesday at noon, Marketplace upstairs
- Topic: ??

Study abroad in CS for majors

- Wednesday 4pm, Noyce 3821
- Learn about AIT program, eat pizza, win a Rubik's cube

CS Poster Session

- Thursday 4:15pm, HSSC A1231

READING REVIEW

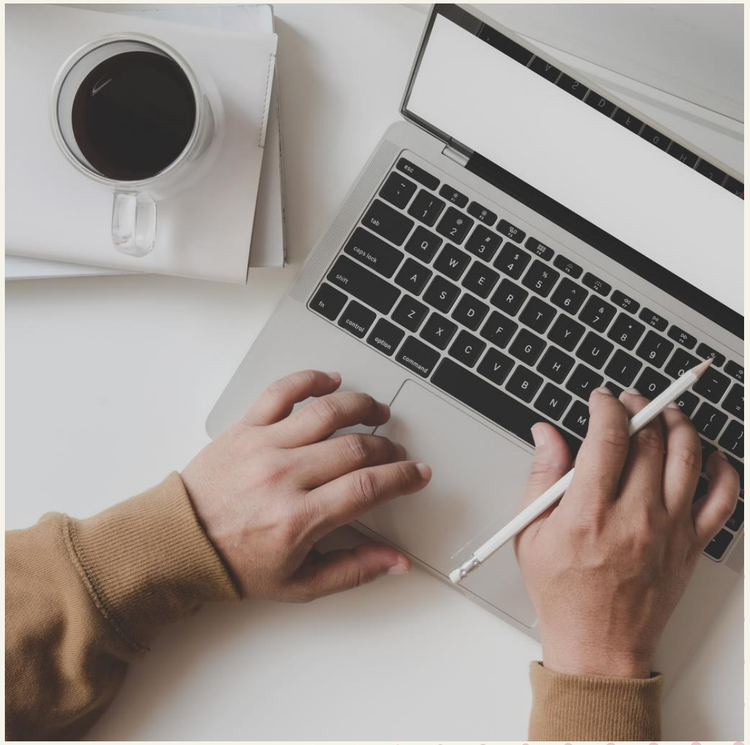
```
(define fun1
  (lambda (lst)
    (match lst
      [null {??}]
      [(cons head tail)
        (some-proc {??} (fun1 {??}))])))

(define fun2
  (lambda (n lst)
    (match lst
      [null null]
      [(cons head tail)
        (fun2 {??} (some-proc {??}))])))
```

1. **Which of these two procedures is using tail recursion?**
2. **How do you know it's tail recursion?**
3. **What benefit is there to tail recursion over "regular" recursion?**

READING REVIEW

4 **Re-write this procedure using tail recursion**

```
(define factorial
  (lambda (n)
    (match n
      [0 1]
      [_ (* n (factorial (- n 1)))])))
```



Questions?

Lab Time