

## Steps

1. Structural recursion template for (listof X)
2. Wrapping in local with trampoline
3. Adding accumulator parameter
  - As argument to inner function
  - After every ...
  - Any call to the inner function
  - Acc. value in the trampoline as ...
4. Specify the type, invariant, and examples of acc.
5. Complete the function
  - Don't forget to **Initialize, update, exploit** the accumulator

## 1:Structural recursion template for (listof X)

```
(define (fn-for-lox lox)
  (cond [(empty? lox) (...)]
        [else
         (... (first lox)
              (fn-for-lox (rest lox)))]))
```

## 2:Wrapping in local with trampoline

```
(define (outer-fn lox0)
  (local [(define (fn-for-lox lox)
             (cond [(empty? lox) (...)]
                   [else
                    (... (first lox)
                        (fn-for-lox (rest lox)))]))]
    (fn-for-lox lox0)))
```

## 3:Adding accumulator parameter

```
(define (outer-fn lox0)
  ;; acc is Type: <invariant>
  (local [(define (fn-for-lox lox acc)
             (cond [(empty? lox) (... acc)]
                   [else
                    (... acc
                        (first lox)
                        (fn-for-lox (rest lox) (... acc)))]))]
    (fn-for-lox lox0 ...)))
```