

```
1 #lang racket
2
3 (define (fac n)
4   (if (= 1 n)
5       1
6       (* n (fac (- n 1)))))
7
8 (fac 4)
9
10 (define (tail-fac n)
11   (letrec ((helper (lambda (n acc)
12                     (if (= 1 n)
13                         acc
14                         (helper (- n 1) (* n acc))))))
15     (helper n 1)))
16
17 (tail-fac 4)
18
```