

**Factorial procedure trace:**

```
>(fact 5 #<procedure:...rec-lang/top.scm:25:19>)
>(fact 4 #<procedure:...rec-lang/top.scm:21:22>)
>(fact 3 #<procedure:...rec-lang/top.scm:21:22>)
>(fact 2 #<procedure:...rec-lang/top.scm:21:22>)
>(fact 1 #<procedure:...rec-lang/top.scm:21:22>)
>(fact 0 #<procedure:...rec-lang/top.scm:21:22>)
```

**Add procedure trace:**

```
(value-of/k
  (add-exp (const-exp 4) (const-exp 3))
  (extend-env
    'i
    (num-val 1)
    (extend-env 'v (num-val 5) (extend-env 'x (num-val 10) (empty-env))))
  (end-cont))
>(value-of/k
  (const-exp 4)
  (extend-env
    'i
    (num-val 1)
    (extend-env 'v (num-val 5) (extend-env 'x (num-val 10) (empty-env))))
  (add1-cont
    (const-exp 3)
    (extend-env
      'i
      (num-val 1)
      (extend-env 'v (num-val 5) (extend-env 'x (num-val 10) (empty-env))))
    (end-cont)))
>(apply-cont
  (add1-cont
```

```
(const-exp 3)
(extend-env
 'i
 (num-val 1)
 (extend-env 'v (num-val 5) (extend-env 'x (num-val 10) (empty-env))))
(end-cont))
(num-val 4))
>(value-of/k
 (const-exp 3)
 (extend-env
 'i
 (num-val 1)
 (extend-env 'v (num-val 5) (extend-env 'x (num-val 10) (empty-env))))
 (add2-cont (num-val 4) (end-cont)))
>(apply-cont (add2-cont (num-val 4) (end-cont)) (num-val 3))
>(apply-cont (end-cont) (num-val 7))
End of computation.
```