```
Josephs-Air-2:scheme JosephHayes$ python3 ok -q 08 -u
====================================================================
Assignment: Project 4: Scheme Interpreter
OK, version v1.13.11
====================================================================

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Unlocking tests

At each "? ", type what you would expect the output to be.
Type exit() to quit

--------------------------------------------------------------------
Problem 8 > Suite 1 > Case 1
(cases remaining: 7)

-- Already unlocked --

--------------------------------------------------------------------
Problem 8 > Suite 1 > Case 2
(cases remaining: 6)

>>> from scheme import *
>>> env = create_global_frame()
>>> lst = Pair(1, Pair(2, Pair(3, Pair(4, Pair(5, nil)))))
>>> eval_all(lst, env)
5
>>> lst      # The list should not be mutated!
? exit()

-- Exiting unlocker --

Backup... 100% complete
Backup successful for user: joseph.hayes@berkeley.edu

Checking for software updates...
OK is up to date
Josephs-Air-2:scheme JosephHayes$ python3 scheme_reader.py
Josephs-Air-2:scheme JosephHayes$ python3 -i scheme_reader.py
>>> lst = Pair(1, Pair(2, Pair(3, Pair(4, Pair(5, nil)))))
>>> lst
Pair(1, Pair(2, Pair(3, Pair(4, Pair(5, nil)))))
>>> from scheme import *
>>> env = create_global_frame()
>>> eval_all(lst, env)
1
>>> lst
Pair(1, Pair(2, Pair(3, Pair(4, Pair(5, nil)))))
>>> exit()
Josephs-Air-2:scheme JosephHayes$ python3 ok -q 08 -u
====================================================================
Assignment: Project 4: Scheme Interpreter
OK, version v1.13.11
====================================================================

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Unlocking tests

At each "? ", type what you would expect the output to be.
Type exit() to quit

--------------------------------------------------------------------
Problem 8 > Suite 1 > Case 1
(cases remaining: 7)

-- Already unlocked --

--------------------------------------------------------------------
Problem 8 > Suite 1 > Case 2
(cases remaining: 6)

>>> from scheme import *
>>> env = create_global_frame()
>>> lst = Pair(1, Pair(2, Pair(3, Pair(4, Pair(5, nil)))))
```

```
>>> eval_all(lst, env)
5
>>> lst      # The list should not be mutated!
? Pair(1, Pair(2, Pair(3, Pair(4, Pair(5, nil))))))
-- OK! --

---------------------------------------------------------------
Problem 8 > Suite 1 > Case 3
(cases remaining: 5)

>>> from scheme import *
>>> env = create_global_frame()
>>> eval_all(Pair(Pair('-', Pair(10, Pair(5, nil))), nil), env)
? 5
-- OK! --

>>> call_expr = Pair('+', Pair(1, Pair(2, nil)))
>>> print_expr = Pair('print', Pair(10, nil))
>>> if_expr = Pair('if', Pair(3, Pair(4, Pair(5, nil))))
>>> exprs = Pair(call_expr, Pair(print_expr, Pair(if_expr, nil)))
>>> eval_all(exprs, env)
(line 1)? 5
-- Not quite. Try again! --

(line 1)? 3
-- Not quite. Try again! --

(line 1)? (+ 1 2)
-- Not quite. Try again! --

(line 1)?
-- Not quite. Try again! --

(line 1)? 10
(line 2)? 5
-- Not quite. Try again! --

(line 1)? 10
(line 2)? SchemeError
-- Not quite. Try again! --

(line 1)? 10
(line 2)? if
-- Not quite. Try again! --

(line 1)? 10
(line 2)? 3
-- Not quite. Try again! --

(line 1)? 10
(line 2)? 4
-- OK! --

---------------------------------------------------------------
Problem 8 > Suite 2 > Case 1
(cases remaining: 4)


scm> (begin (+ 2 3) (+ 5 6))
? 11
-- OK! --

scm> (begin (define x 3) x)
? c
-- Not quite. Try again! --

? x
-- Not quite. Try again! --

? 3
-- OK! --

---------------------------------------------------------------
Problem 8 > Suite 2 > Case 2
```

```
(cases remaining: 3)

scm> (begin 30 '(+ 2 2))
Choose the number of the correct choice:
0) 30
1) (+ 2 2)
2) '(+ 2 2)
3) 4
? 0
-- Not quite. Try again! --

Choose the number of the correct choice:
0) 30
1) (+ 2 2)
2) '(+ 2 2)
3) 4
? 1
-- OK! --

scm> (define x 0)
? x
-- OK! --

scm> (begin 42 (define x (+ x 1)))
? 42
-- Not quite. Try again! --

? x
-- OK! --

scm> x
? 2
-- Not quite. Try again! --

? 1
-- OK! --

----------------------------------------------------------------
Problem 8 > Suite 2 > Case 3
(cases remaining: 2)

-- Already unlocked --

----------------------------------------------------------------
Problem 8 > Suite 2 > Case 4
(cases remaining: 1)

-- Already unlocked --

----------------------------------------------------------------
OK! All cases for Problem 8 unlocked.

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Checking for software updates...
OK is up to date
Josephs-Air-2:scheme JosephHayes$
```