

**Tutorial:** Write a function similar to `keep_ints` like before, but now it takes in a number n and returns a function that has one parameter cond. The returned function prints out numbers from 1 to n where calling cond on that number returns True.

def make\_keeper(n):

① prints

② if

③ while

④ counter

"""Returns a function which takes one parameter cond and prints out all integers 1..i..n where calling cond(i) returns True.

>>> def is\_even(x):

...     # Even numbers have remainder 0 when divided by 2.

...     return x % 2 == 0

>>> make\_keeper(5)(is\_even)

2

4

"""

def cond(cond):



1 counter = 1

2 functions:

3 while (counter <= n)

1 inside another

4 if (cond(counter))

5 print counter

6 counter += 1

return cond



0 1 0

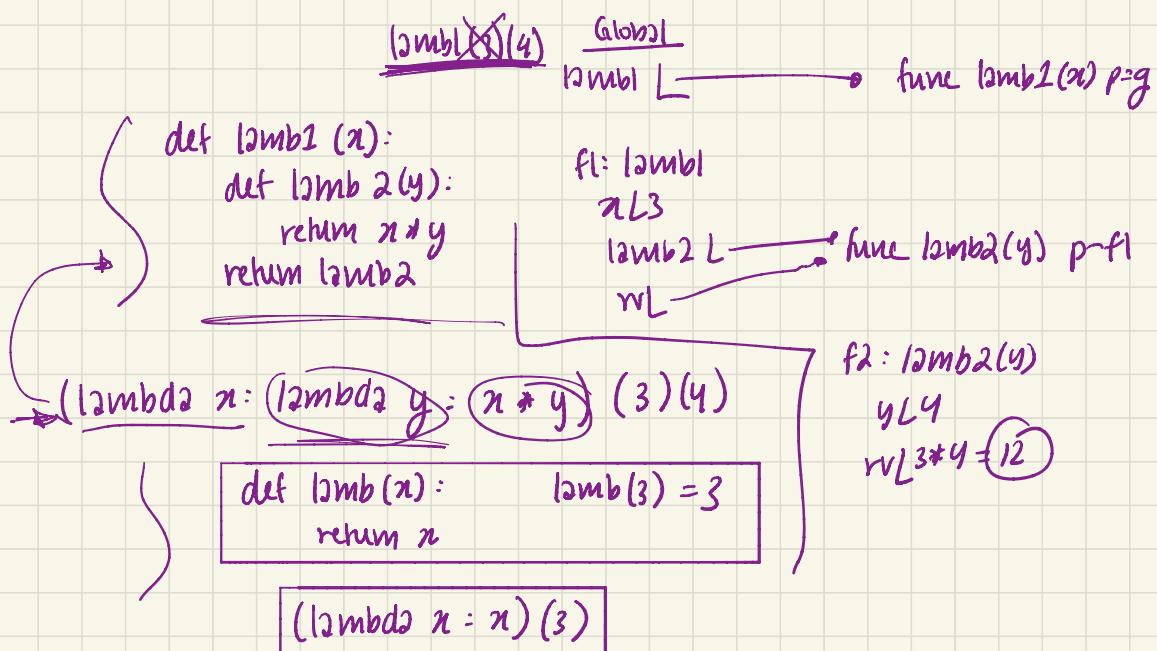
flip with  
bit

0 << 2

0 0 0

- 1.5 Tutorial: Draw the environment diagram that results from executing the code below.

```
1 n = 7
2
3 def f(x):
4     n = 8
5     return x + 1
6
7 def g(x):
8     n = 9
9     def h():
10        return x + 1
11    return h
12
13 def f(f, x):
14     return f(x + n)
15
16 f = f(g, n)
17 g = (lambda y: y()(f))
```



## Question 6

```
def albert(albert):
    albert = albert()
    def albert():
        albert = lambda albert: albert
        return albert(albert)
    return albert
```

albert(lambda: albert)()

Toggle Solution

