

(Task 2 of 4) What is the result of running this program?

Lispy [Run ▶]	Python
<pre>(defvar a 3) (defun (foo b) (defun (bar) (defvar c 6) (+ a b c)) (bar)) (+ (foo 4) 2)</pre>	<pre>a = 3 def foo(b): def bar(): c = 6 return a + b + c return bar() print(foo(4) + 2)</pre>

15

2

You predicted the output correctly 🎉🎉🎉

3

This program binds `a` to `3` and `foo` to a function, and then evaluates `(+ (foo 4) 2)`. The value of `(+ (foo 4) 2)` is the value of `(+ (bar) 2)`, which is the value of `(+ (+ a b z) 2)`, which is the value of `(+ (+ 3 4 6) 2)`, which is `10`.

Click [here](#) to run this program in the Stacker.

(Task 3 of 4) What is the result of running this program?

Lispy [Run ▶]	JavaScript
<pre>(defvar i (* j 3)) (defvar j 2) i j</pre>	<pre>let i = j * 3; let j = 2; console.log(i); console.log(j);</pre>

error

5

You predicted the output correctly 🎉🎉🎉

6

The first definition tries to bind `i` to the value of `(* j 3)`. To evaluate `(* j 3)`, we need the value of `j`. But `j` is not bound to a value at that moment.

Click [here](#) to run this program in the Stacker.

(Task 4 of 4) What is the result of running this program?

Lispy [Run ▶]	Python
<pre>(defun (k a) (defvar b 1) (+ a b))</pre>	<pre>def k(a): b = 1 return a + b</pre>

```
(+ (k 3) b)
```

```
print(k(3) + b)
```

error

8

You predicted the output correctly 🎉🎉🎉

9

`(+ (k 3) b)` is evaluated in the top-level block, where `b` is not defined. So, this program errors.

Click [here](#) to run this program in the Stacker.

You have finished this tutorial 🎉🎉🎉

Please `print` the finished tutorial to a PDF file so you can review the content in the future. **Your instructor (if any) might require you to submit the PDF.**

Start time: 1738364137607