

# Snaplet Examples

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## Fundamentals of Programming 1.5

This document provides example solutions to diagramming problems using Snaplet. The following two programs are diagrammed and shown below. Each program is given first (on a separate page from the solution) in case you would like to try the problem yourself before comparing with the given solution.

### Example 1

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### Example 2

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### Example 1 Solution

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### Example 2 Solution

## Example 1

Diagram the following code:

```
1  def foo(x, y):  
2      z = bar(x)  
3      z = z + bar(y)  
4      return z  
5  def bar(x):  
6      return x + 2  
7  a = foo(5, 2)
```

(version without line numbers for easy copying)

```
def foo(x, y):  
    z = bar(x)  
    z = z + bar(y)  
    return z  
def bar(x):  
    return x + 2  
a = foo(5, 2)
```

## Example 2

Diagram the following code:

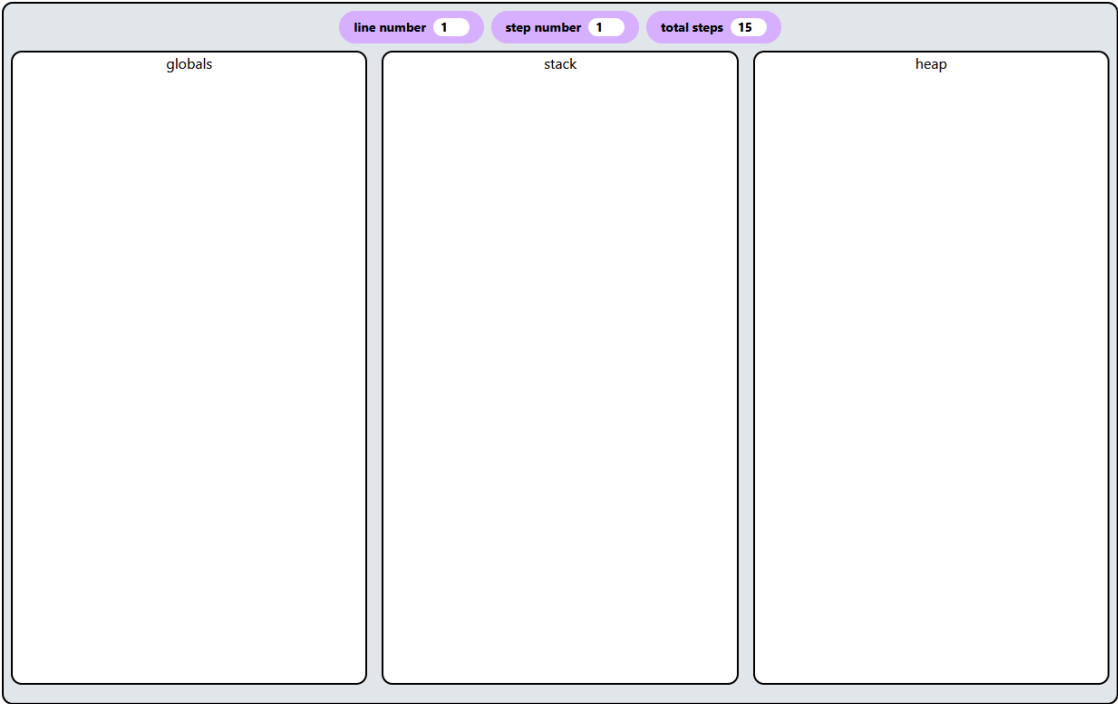
```
1 table = [['hello', 'world'], ['a', 'b']]
2 table[0][1] = table[1][0]
3 new_row = ['new', 'row']
4 table.append(new_row)
5 test = table[2][0]
```

(version without line numbers for easy copying)

```
table = [['hello', 'world'], ['a', 'b']]
table[0][1] = table[1][0]
new_row = ['new', 'row']
table.append(new_row)
test = table[2][0]
```

# Example 1 Solution — Step 1

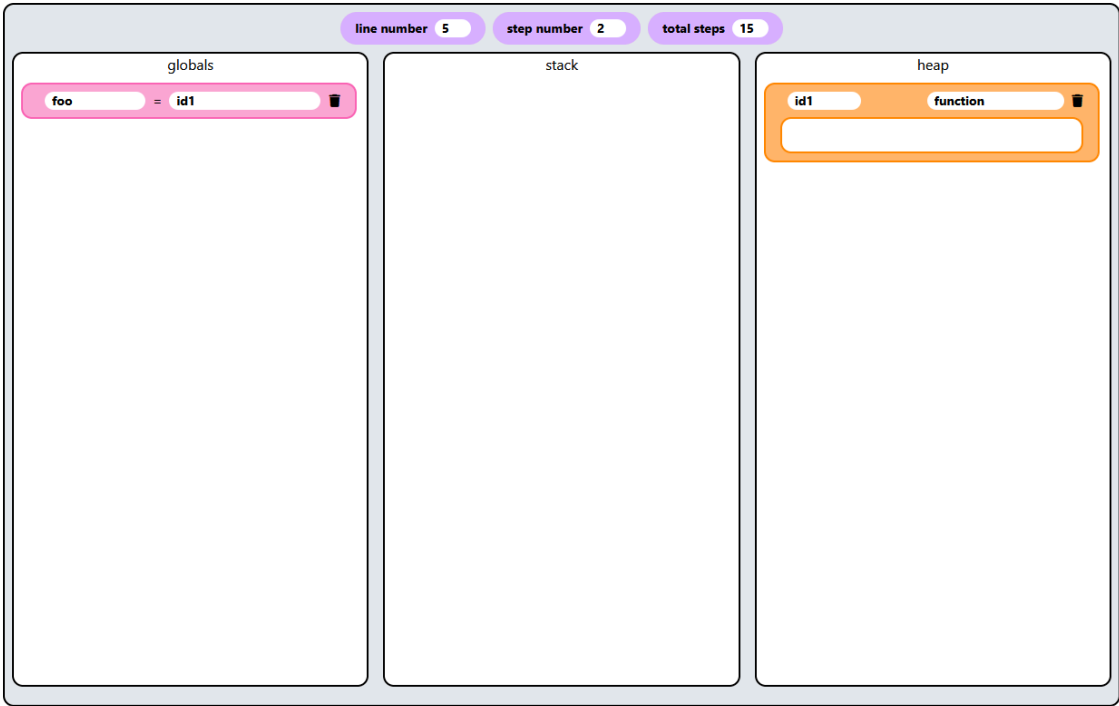
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Example 1 Step 1

# Example 1 Solution — Step 2

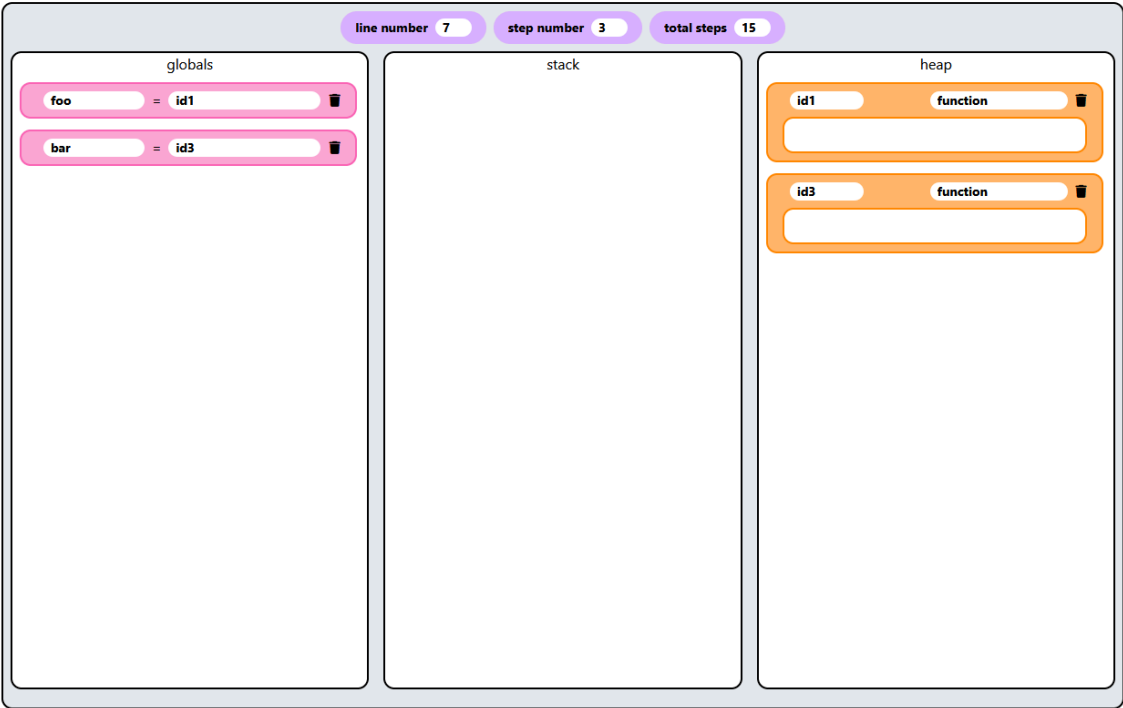
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Example 1 Step 2

# Example 1 Solution — Step 3

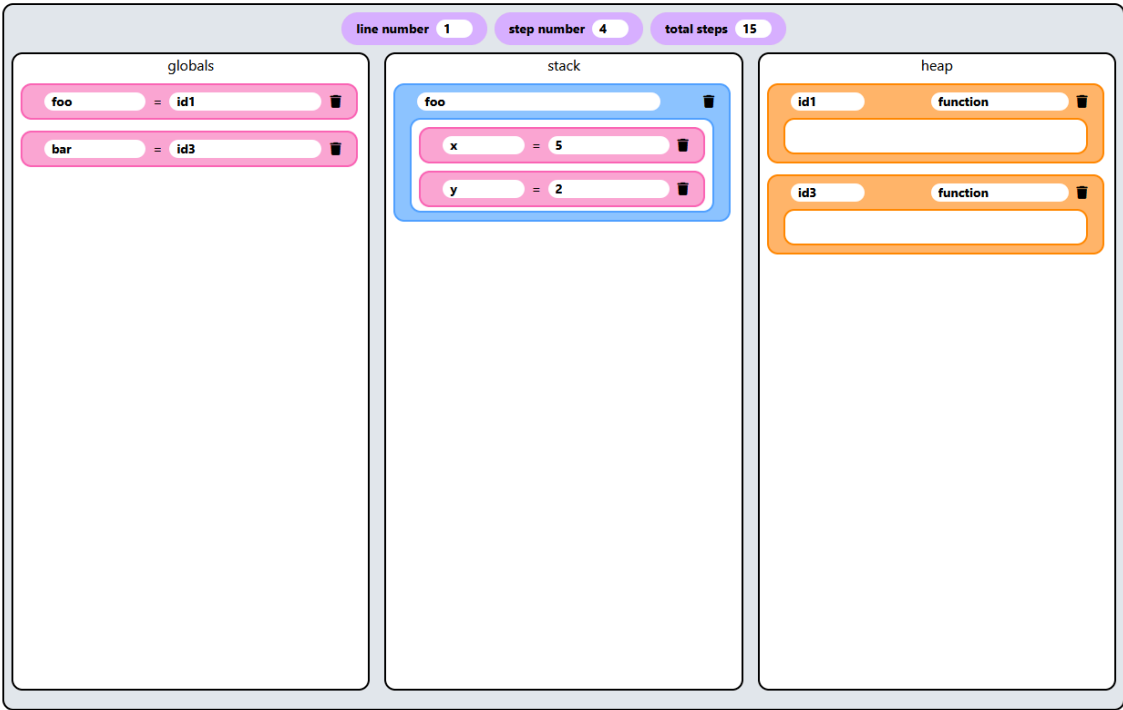
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Example 1 Step 3

# Example 1 Solution — Step 4

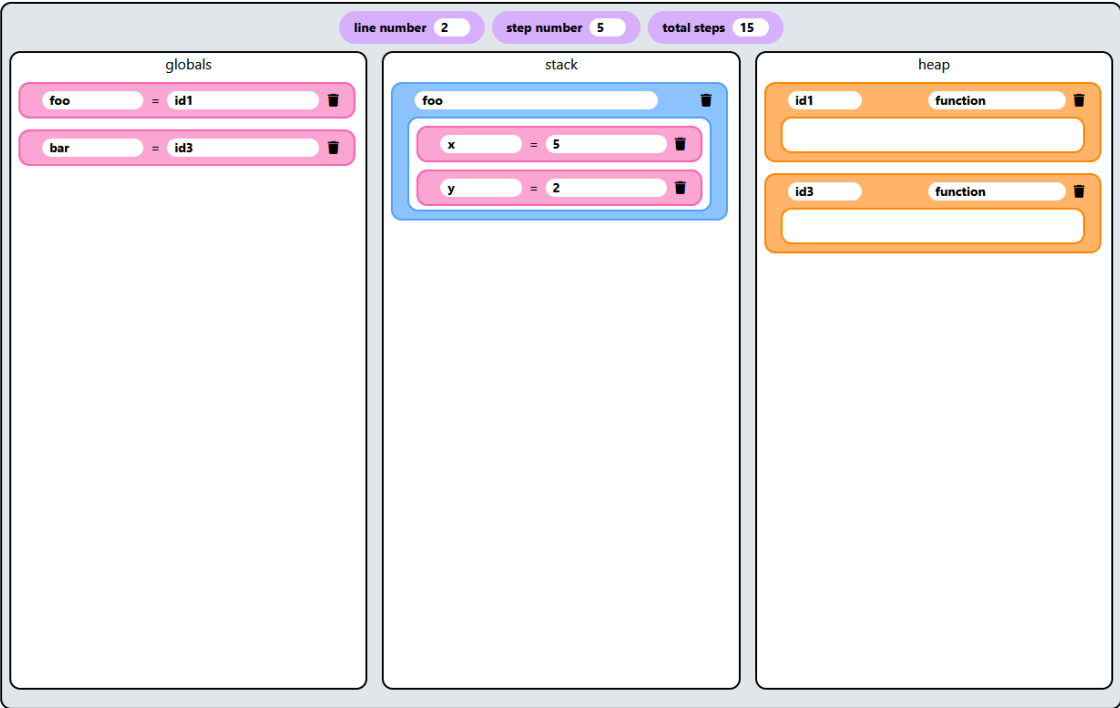
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Example 1 Step 4

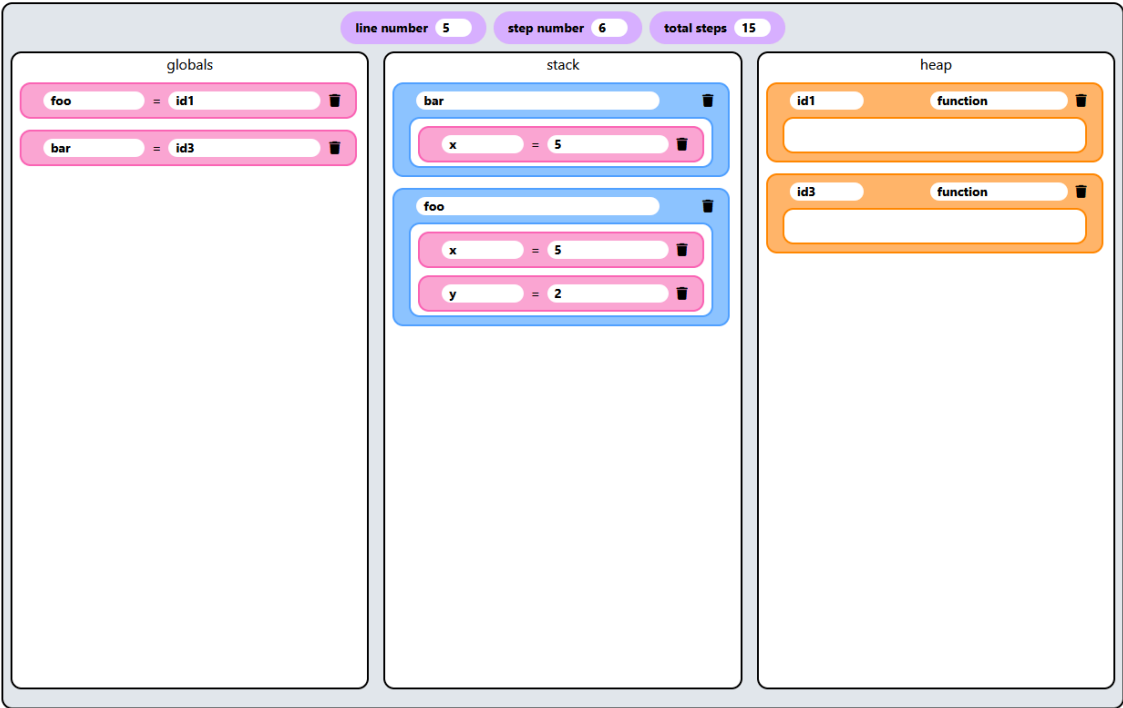
# Example 1 Solution — Step 5

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Example 1 Step 5

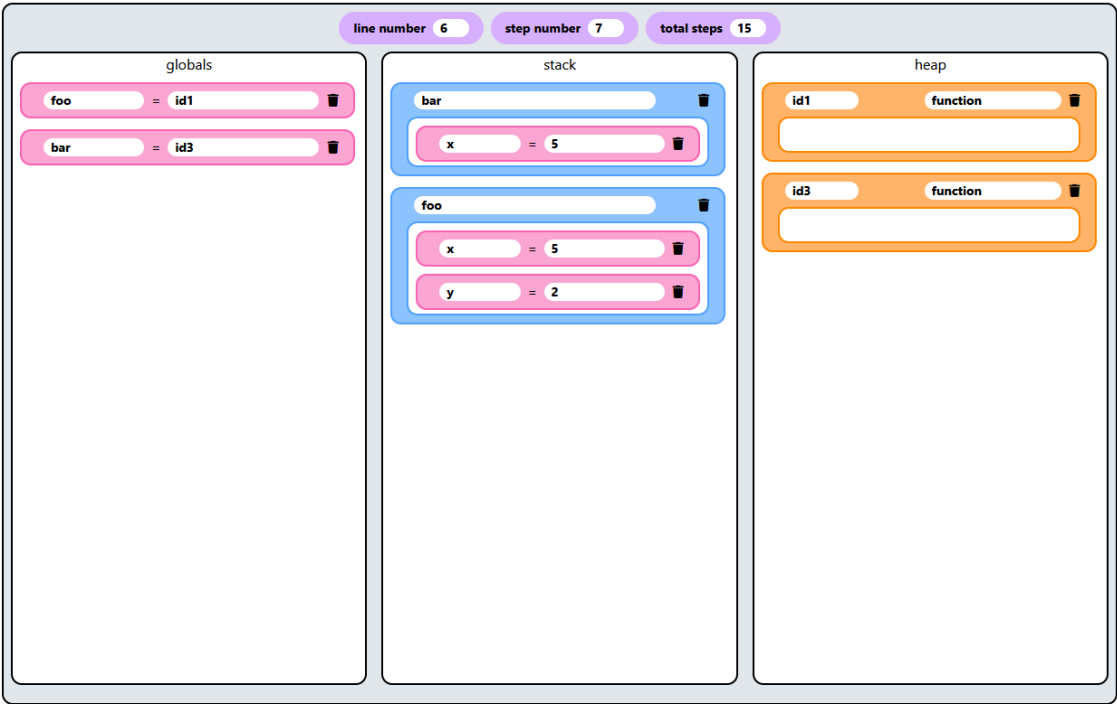
# Example 1 Solution — Step 6



Example 1 Step 6

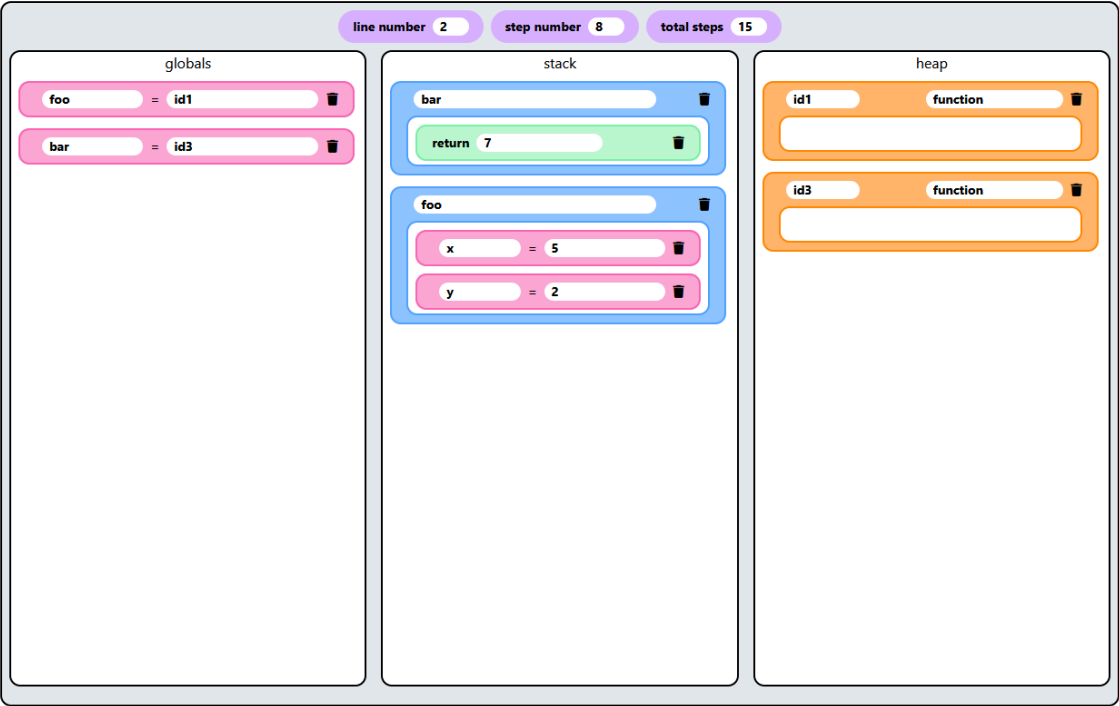


# Example 1 Solution — Step 7



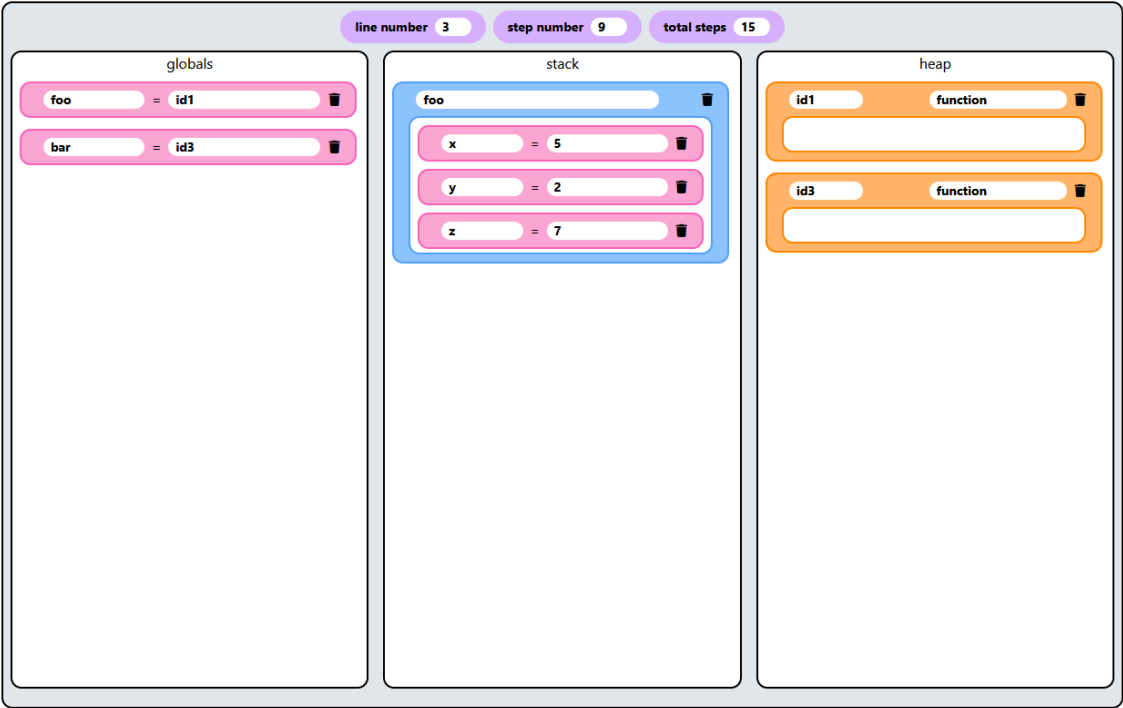
Example 1 Step 7

# Example 1 Solution — Step 8



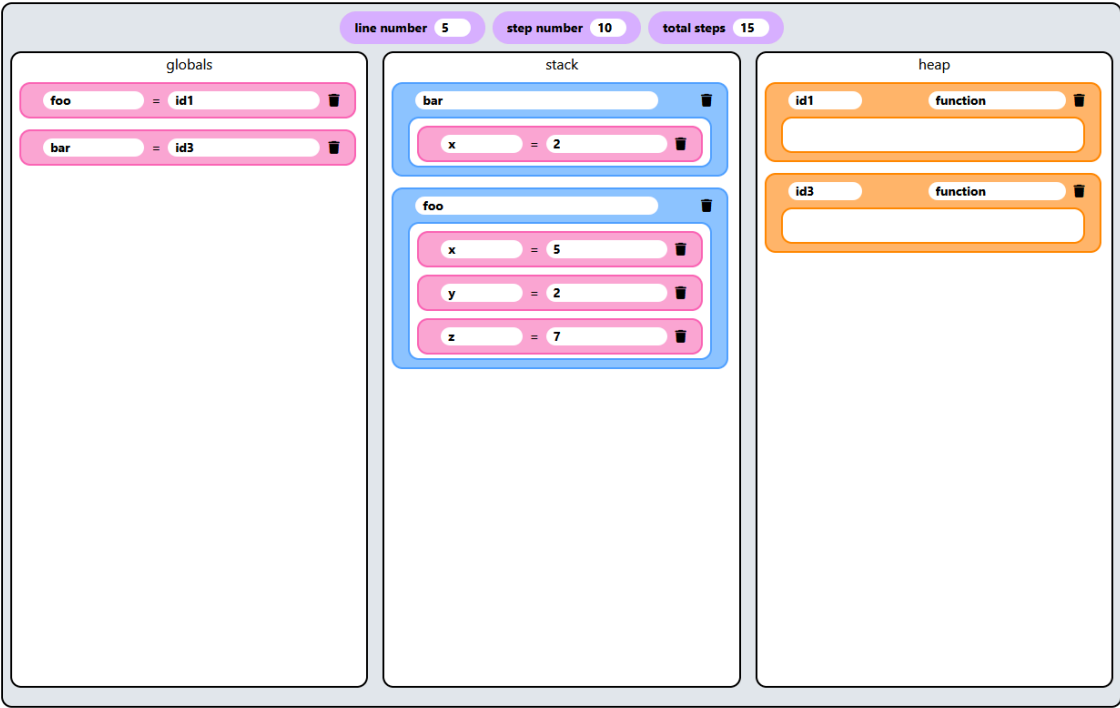
Example 1 Step 8

# Example 1 Solution — Step 9



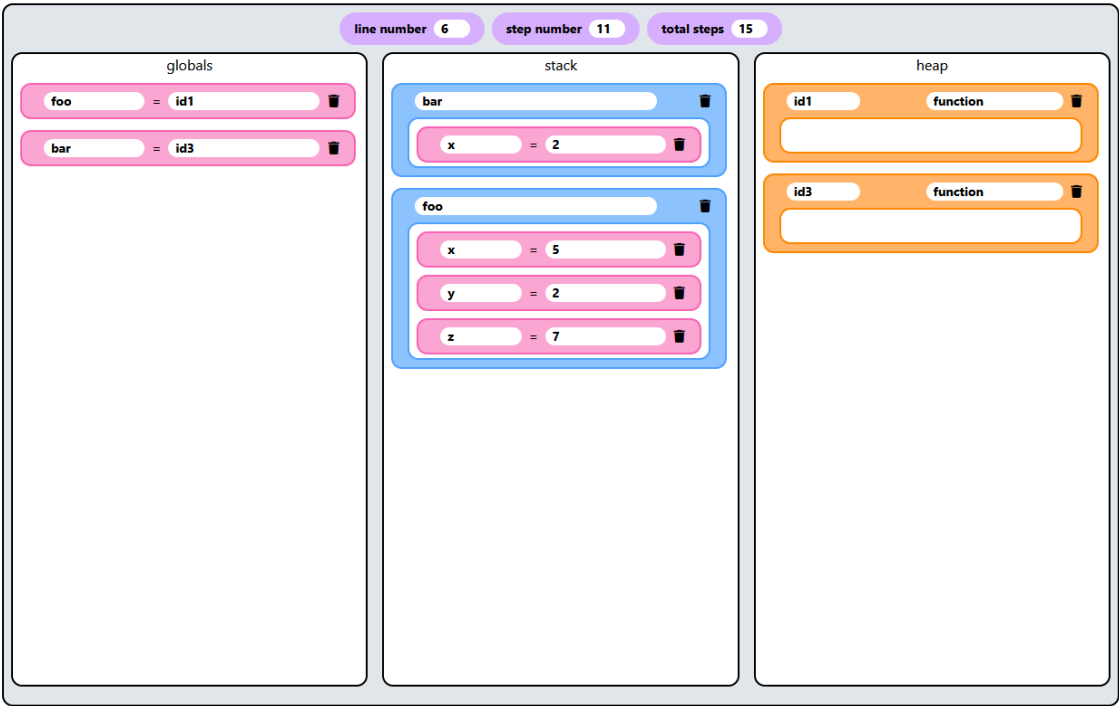
Example 1 Step 9

# Example 1 Solution — Step 10



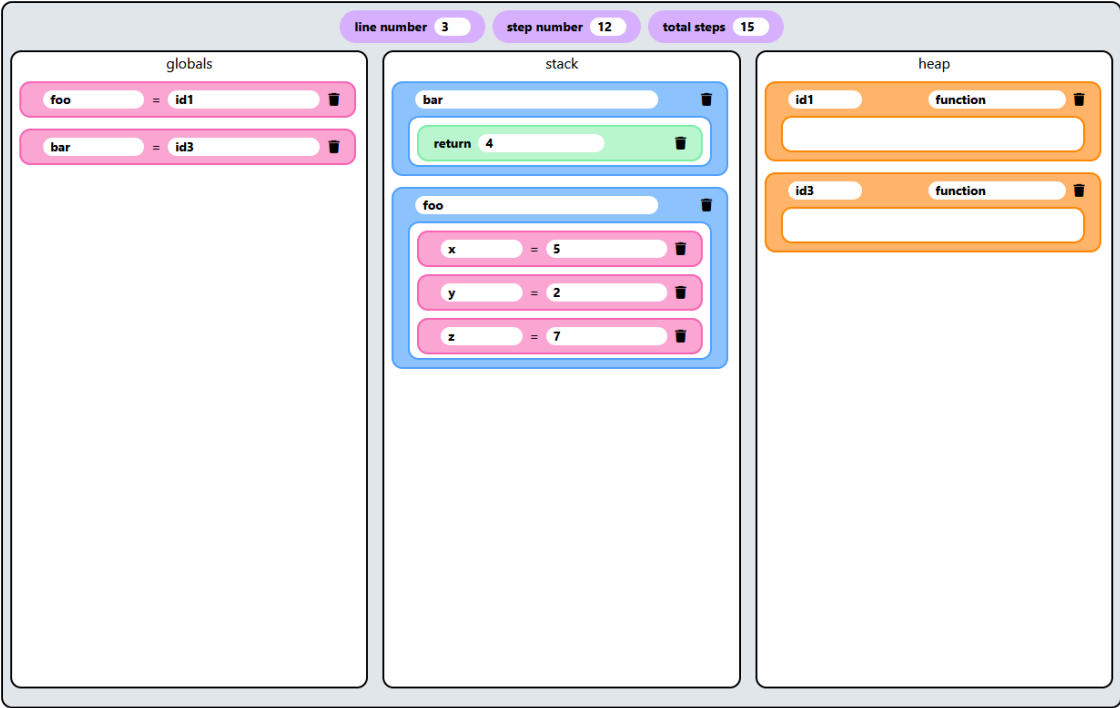
Example 1 Step 10

# Example 1 Solution — Step 11



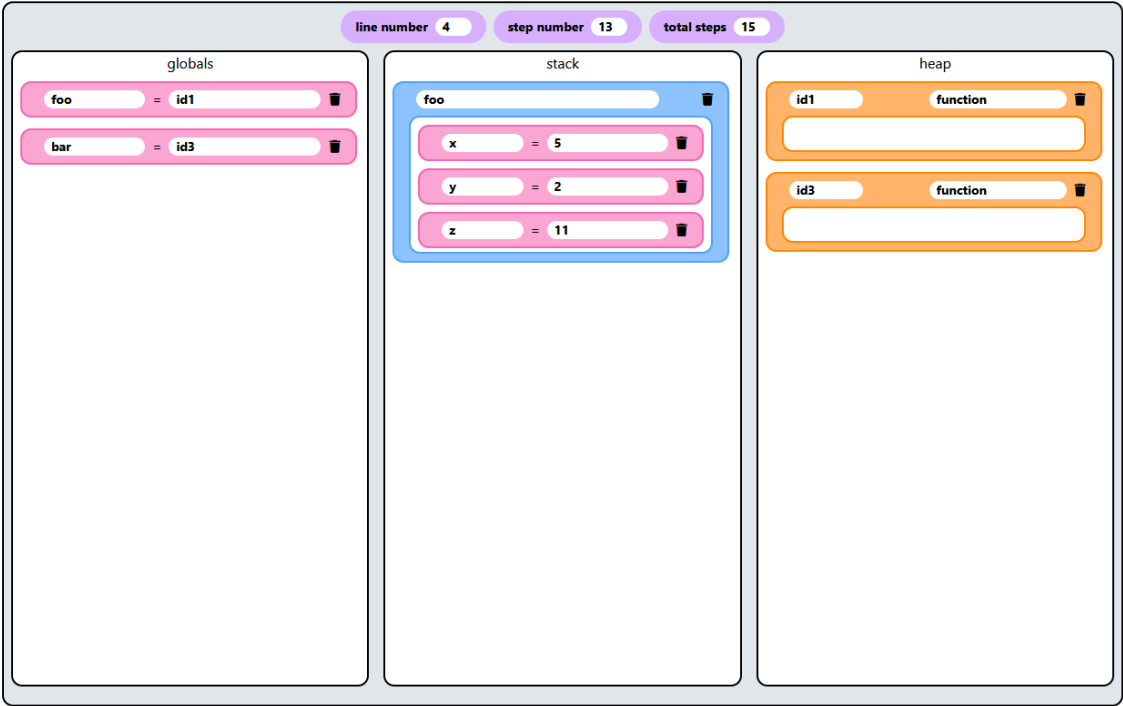
Example 1 Step 11

# Example 1 Solution — Step 12



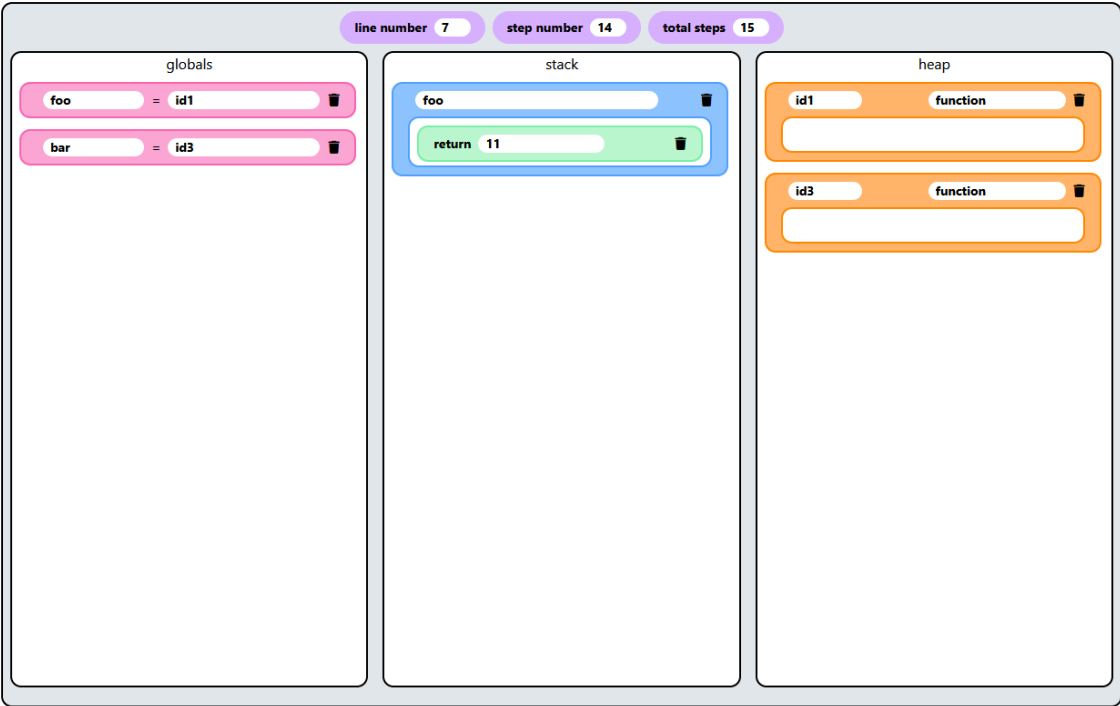
Example 1 Step 12

# Example 1 Solution — Step 13



Example 1 Step 13

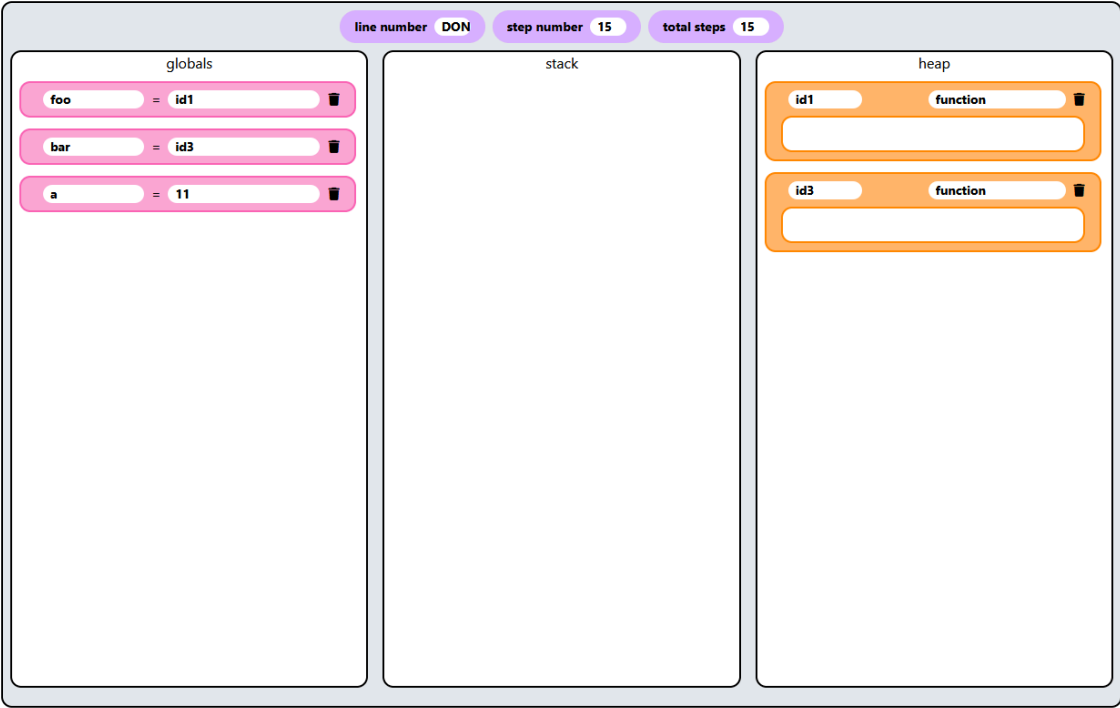
# Example 1 Solution — Step 14



Example 1 Step 14



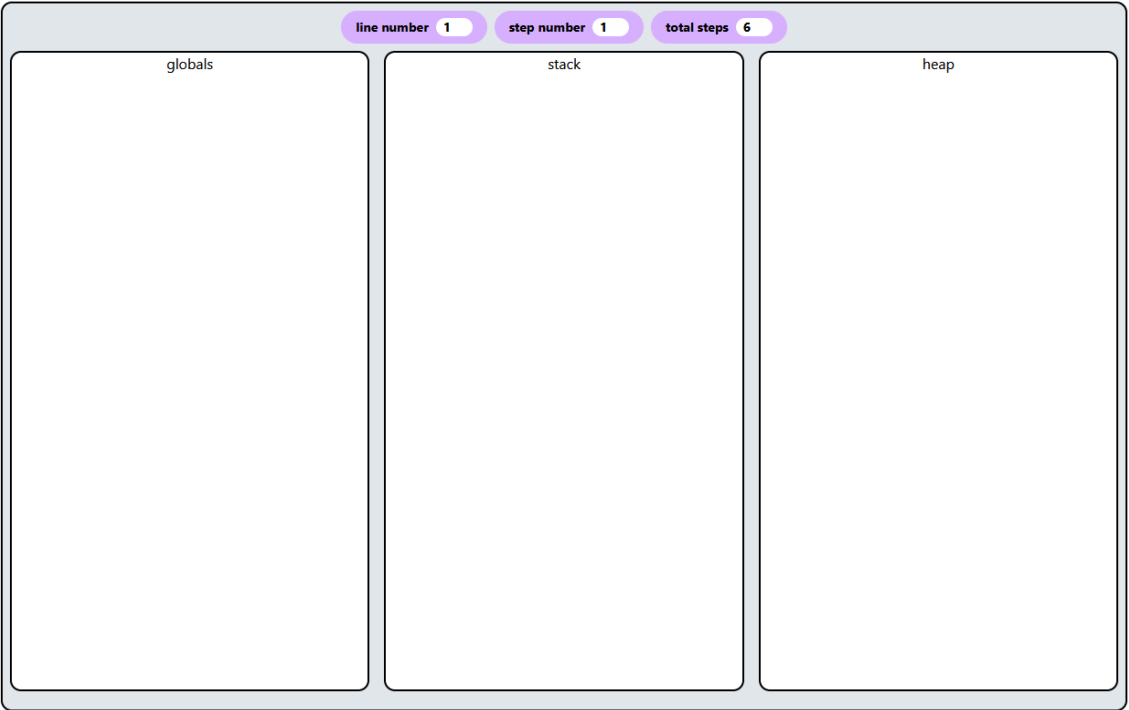
# Example 1 Solution — Step 15 (DONE)



Example 1 Step 15

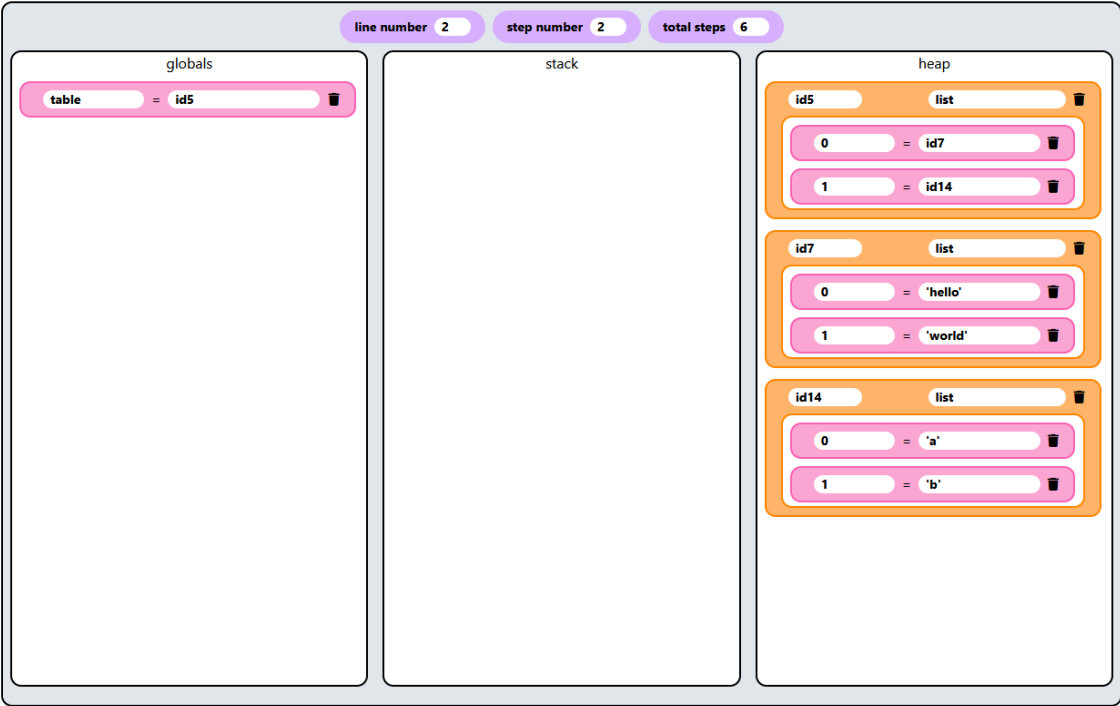
# Example 2 Solution — Step 1

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Example 2 Step 1

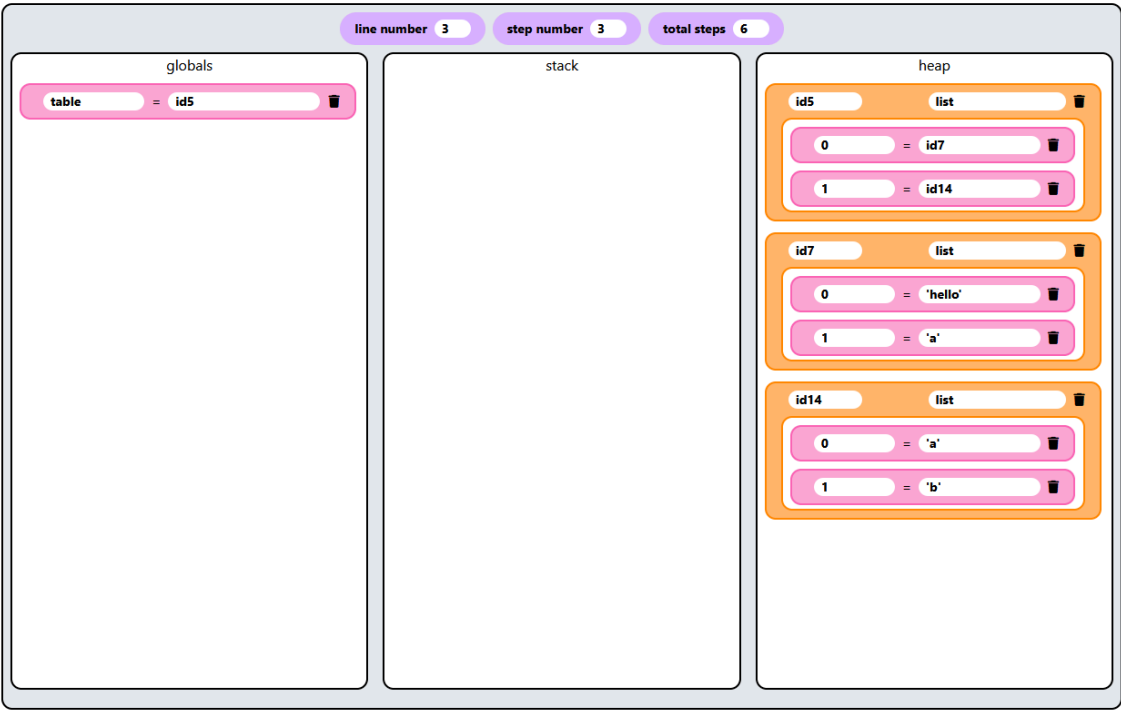
# Example 2 Solution — Step 2



Example 2 Step 2

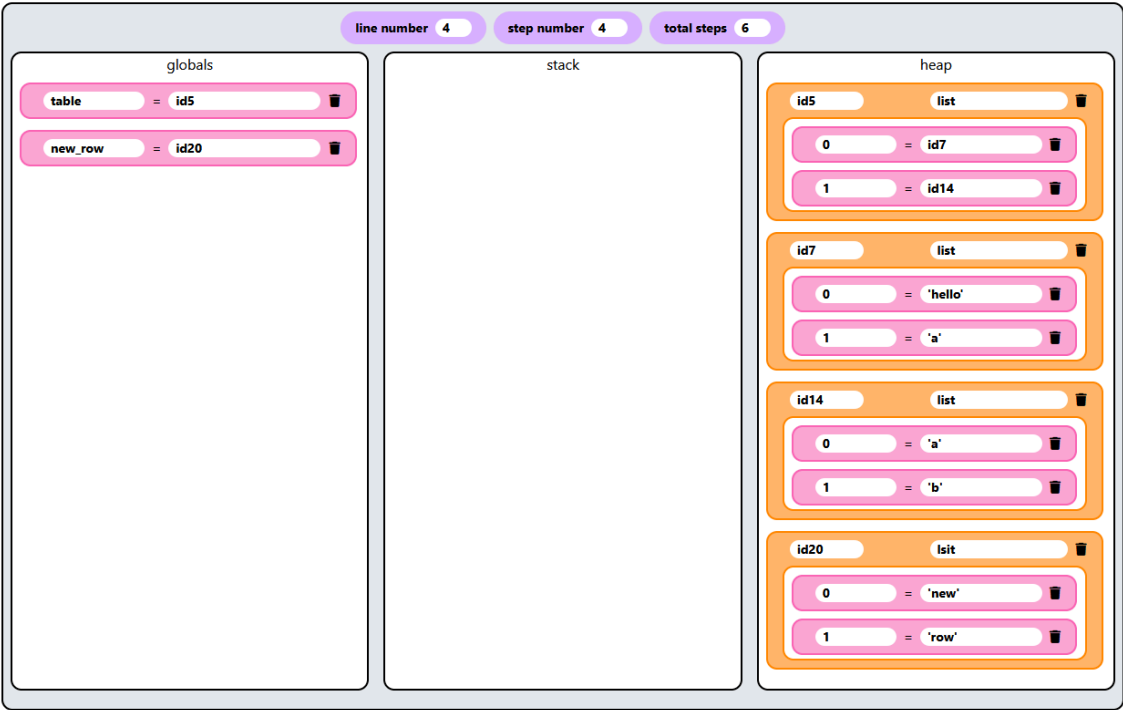
## Example 2 Solution — Step 3

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Example 2 Step 3

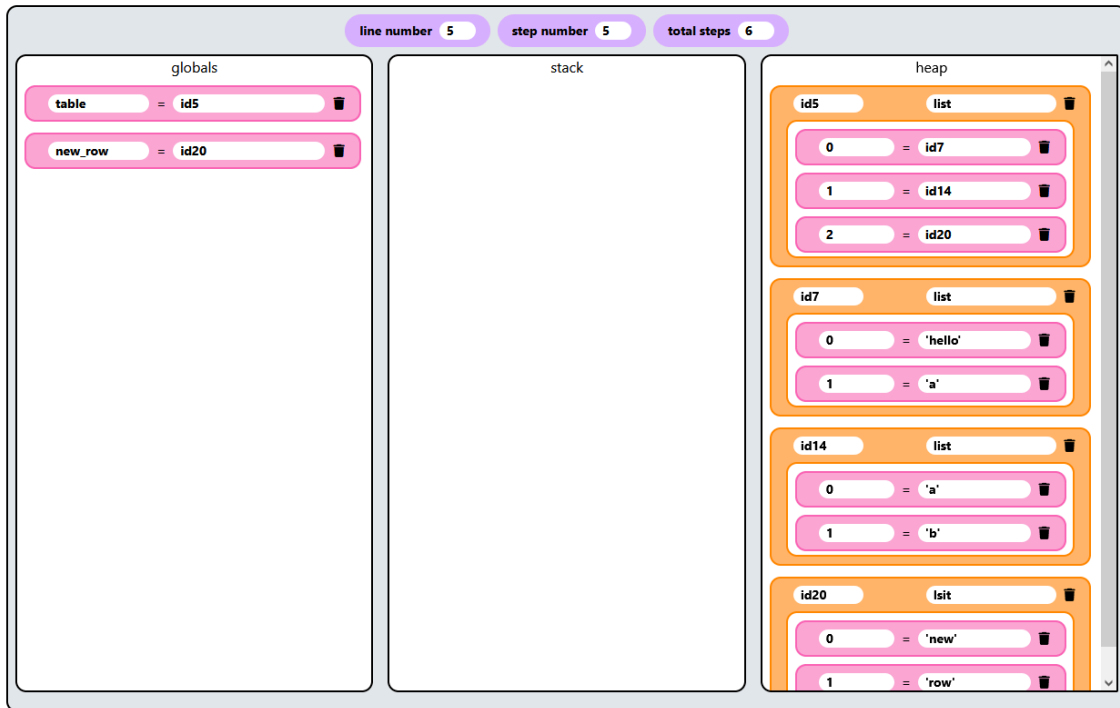
# Example 2 Solution — Step 4



Example 2 Step 4

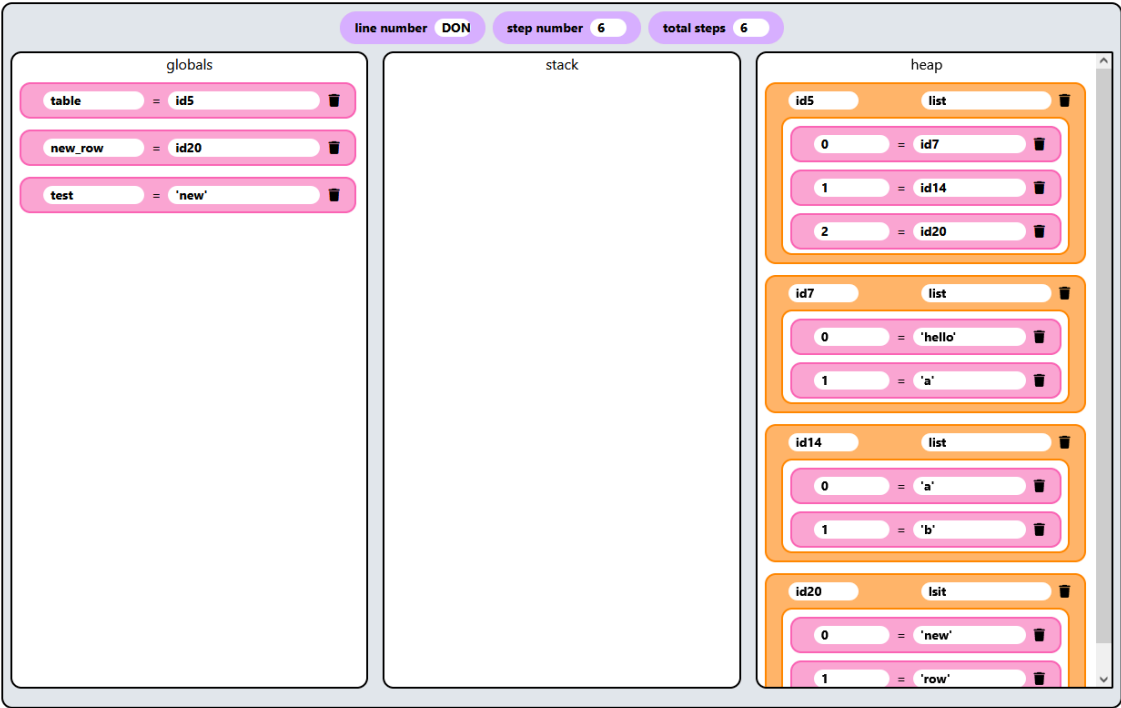
## Example 2 Solution — Step 5

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Example 2 Step 5

# Example 2 Solution — Step 6 (DONE)



Example 2 Step 6