

61A Lecture 12

Monday, September 24

Dictionaries

```
{ 'Dem': 0 }
```

Restrictions on Dictionaries

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- Two **keys cannot be equal**. There can be at most one value for a given key.

This first restriction is tied to Python's underlying implementation of dictionaries.

The second restriction is an intentional consequence of the dictionary abstraction.

Sharing and Identity

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demo = []
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    print('delayed')
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A function that takes any argument and returns a function that returns that arg

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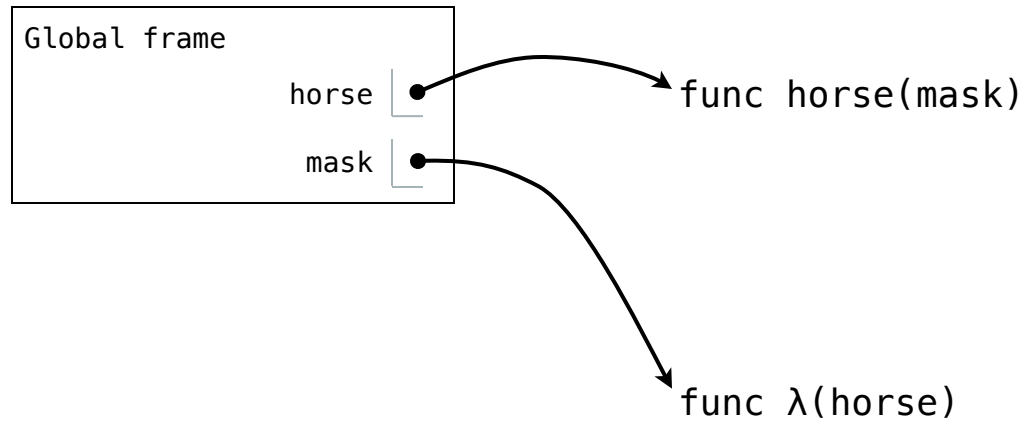
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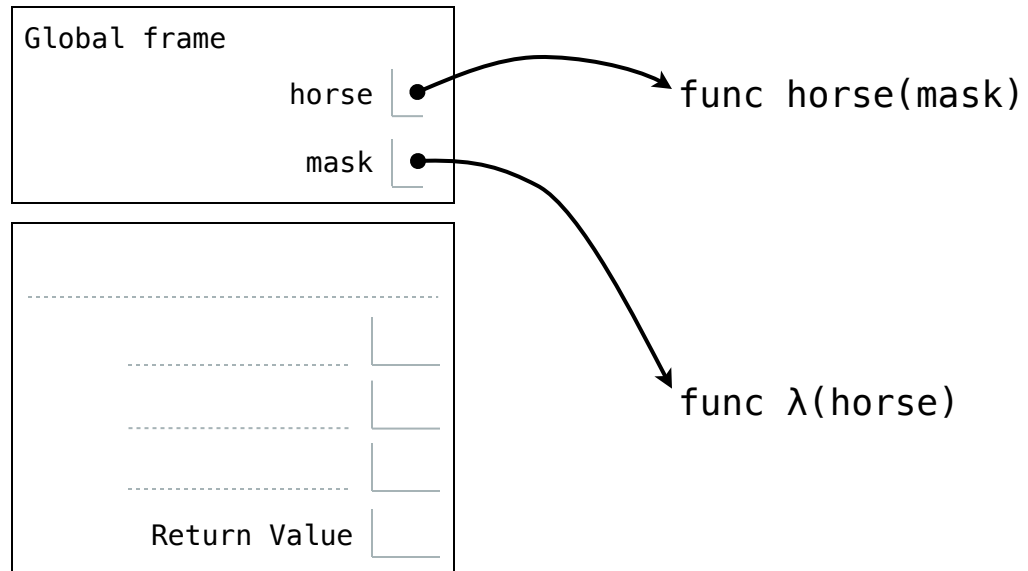

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def horse(mask):  
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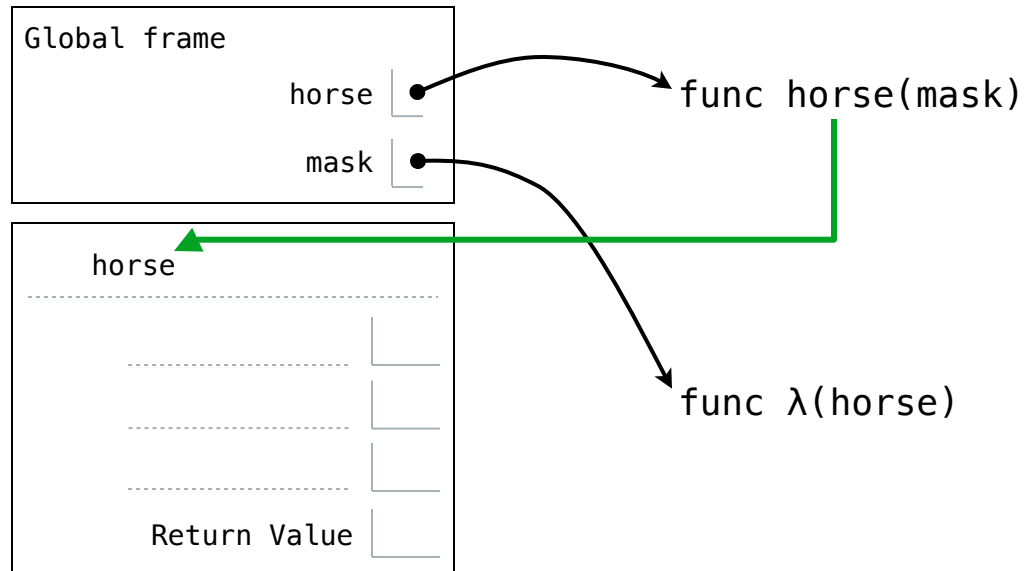
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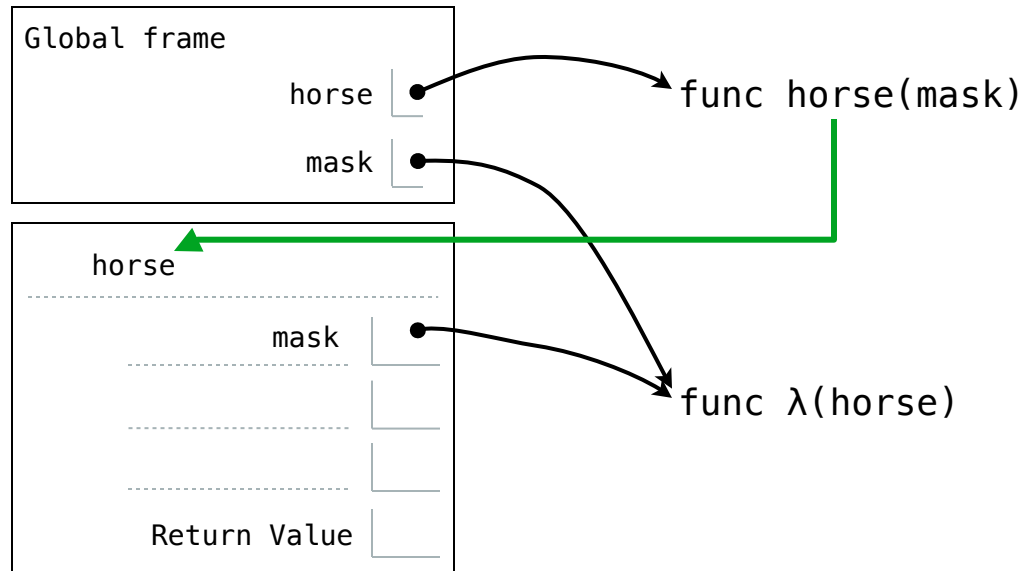
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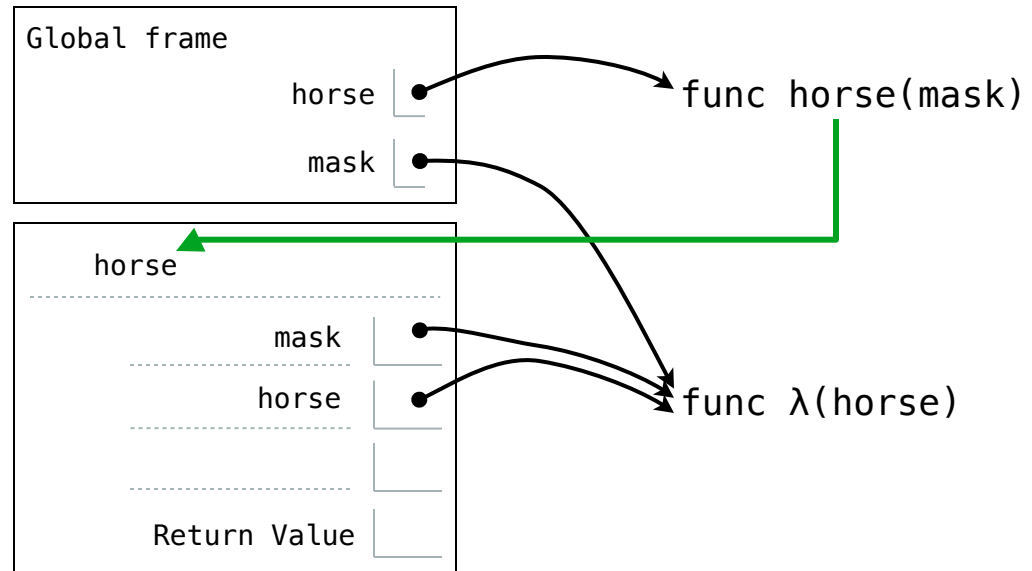
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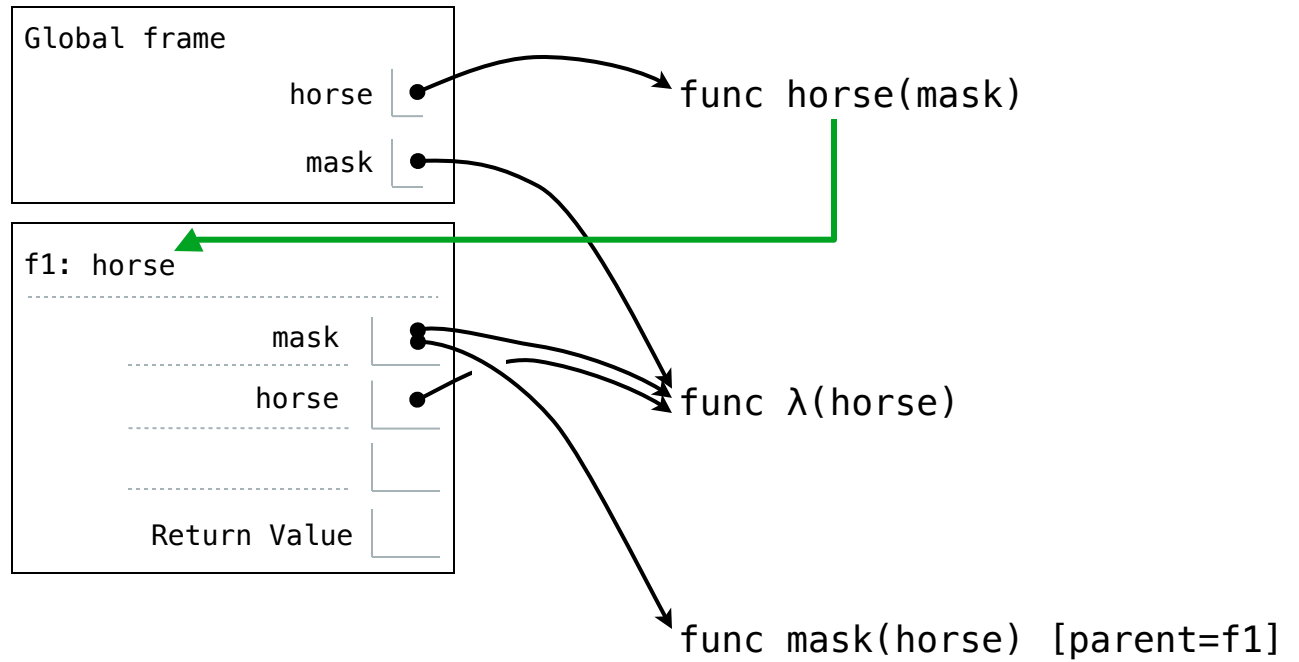
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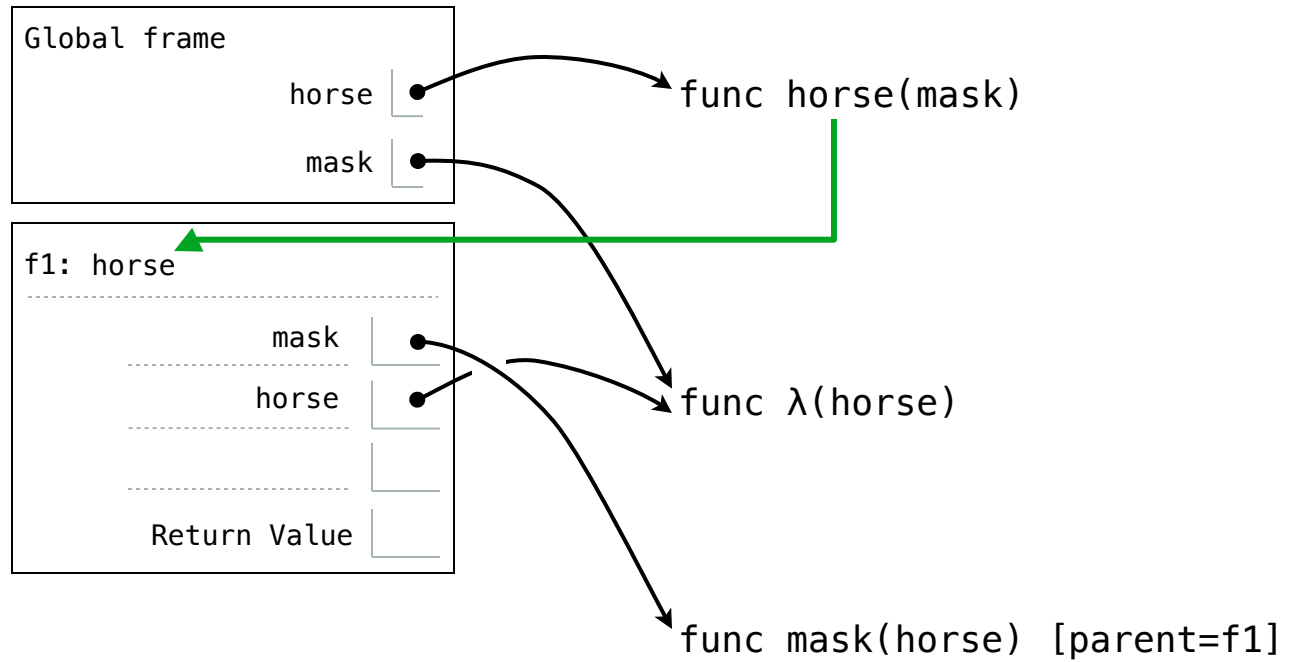
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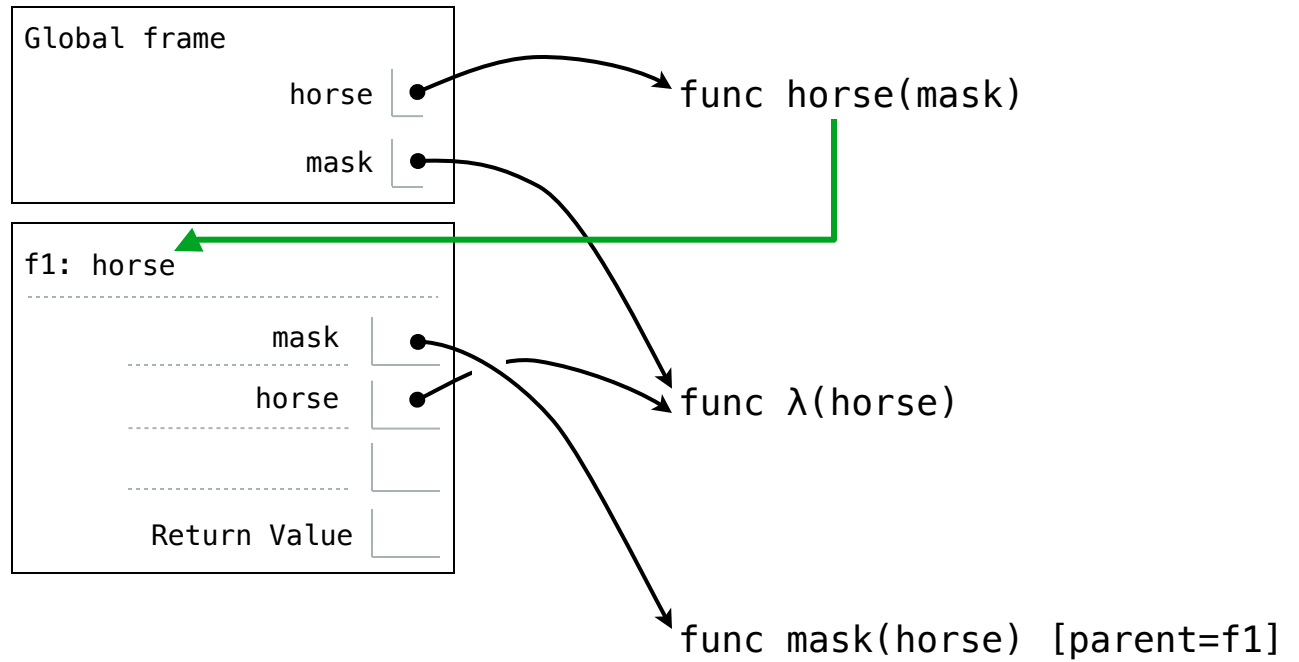
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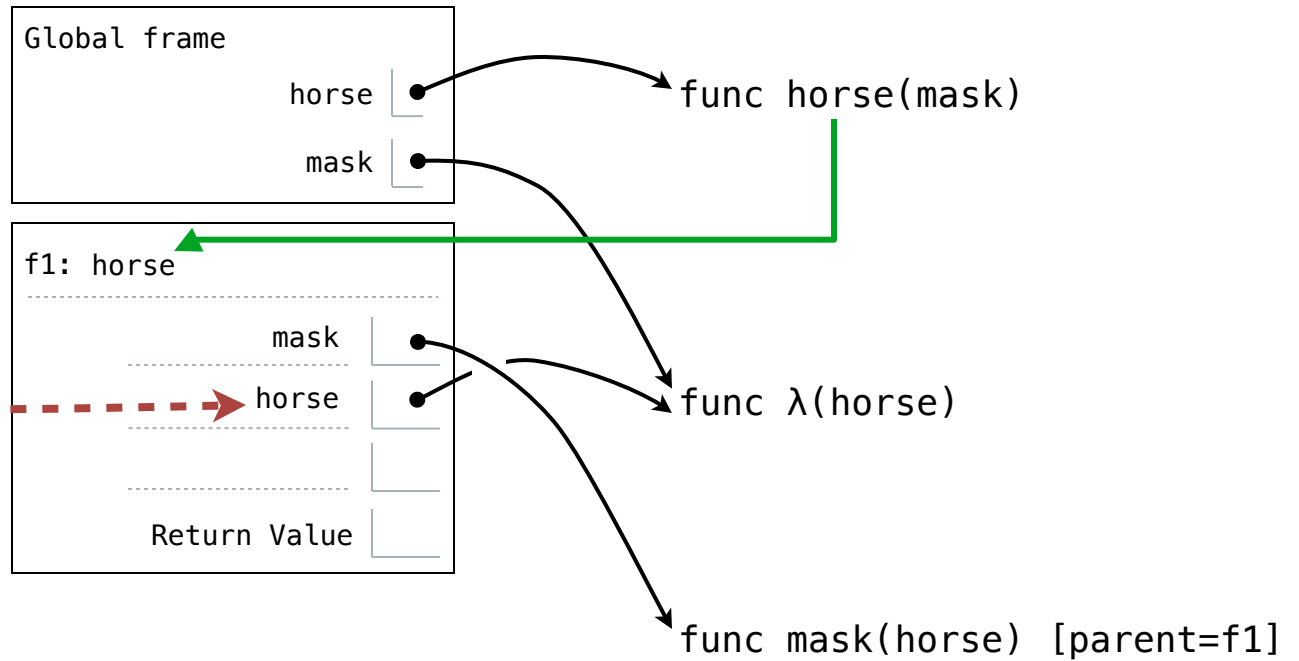
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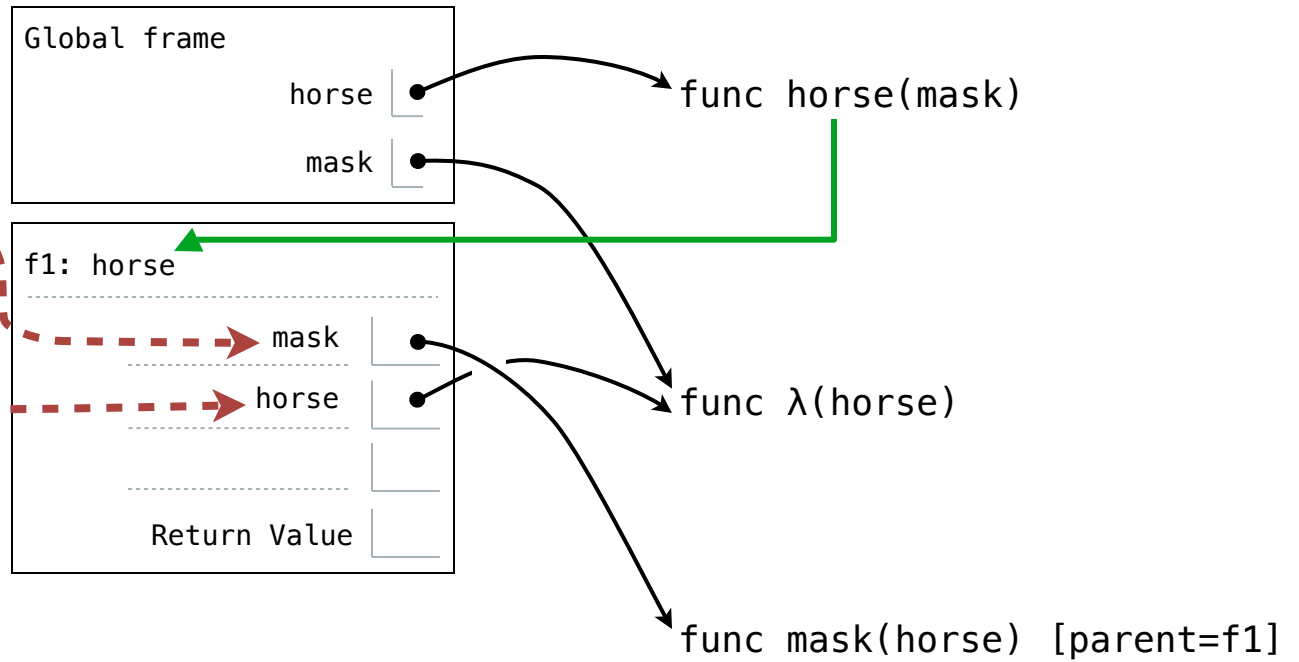
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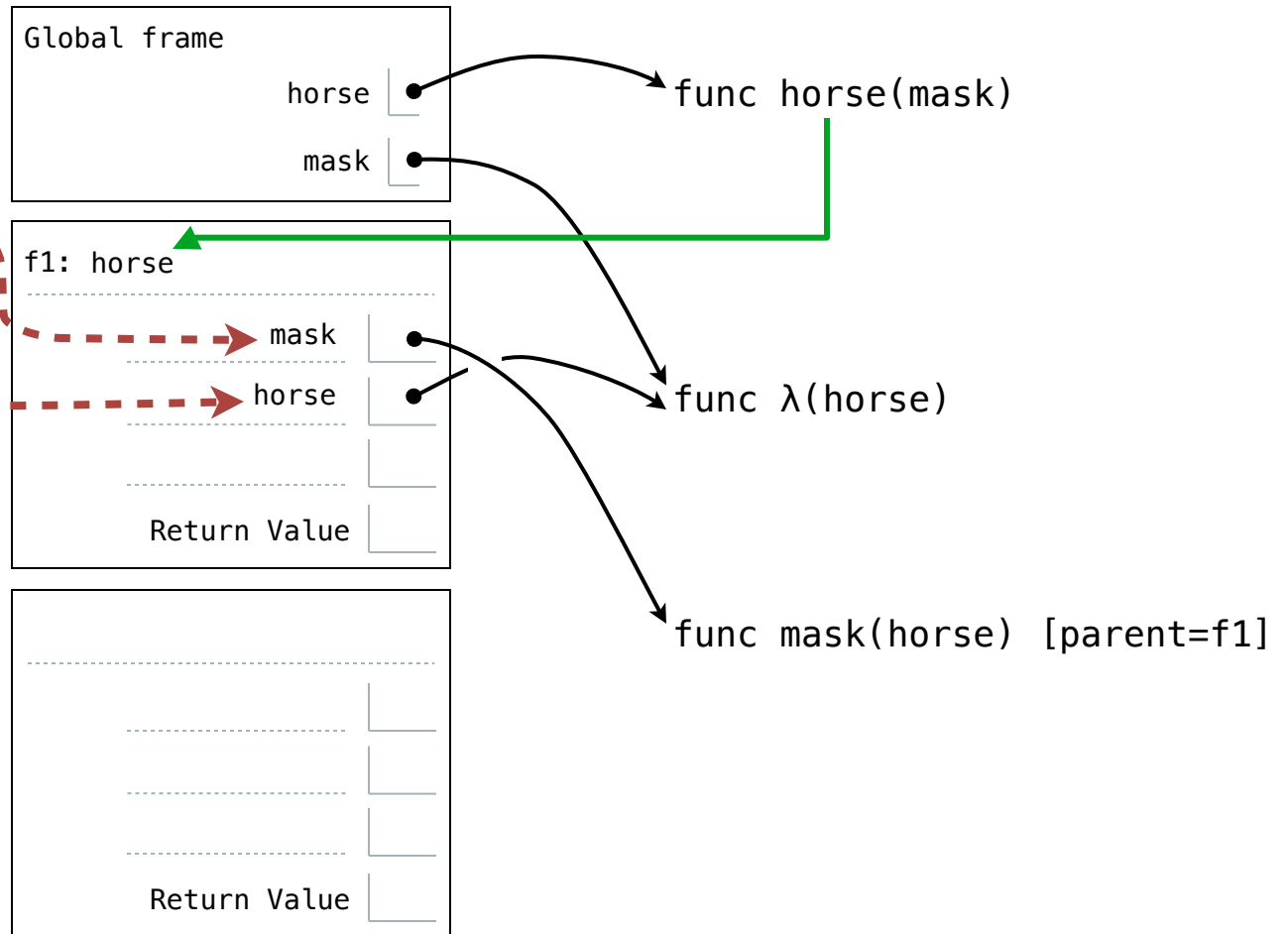
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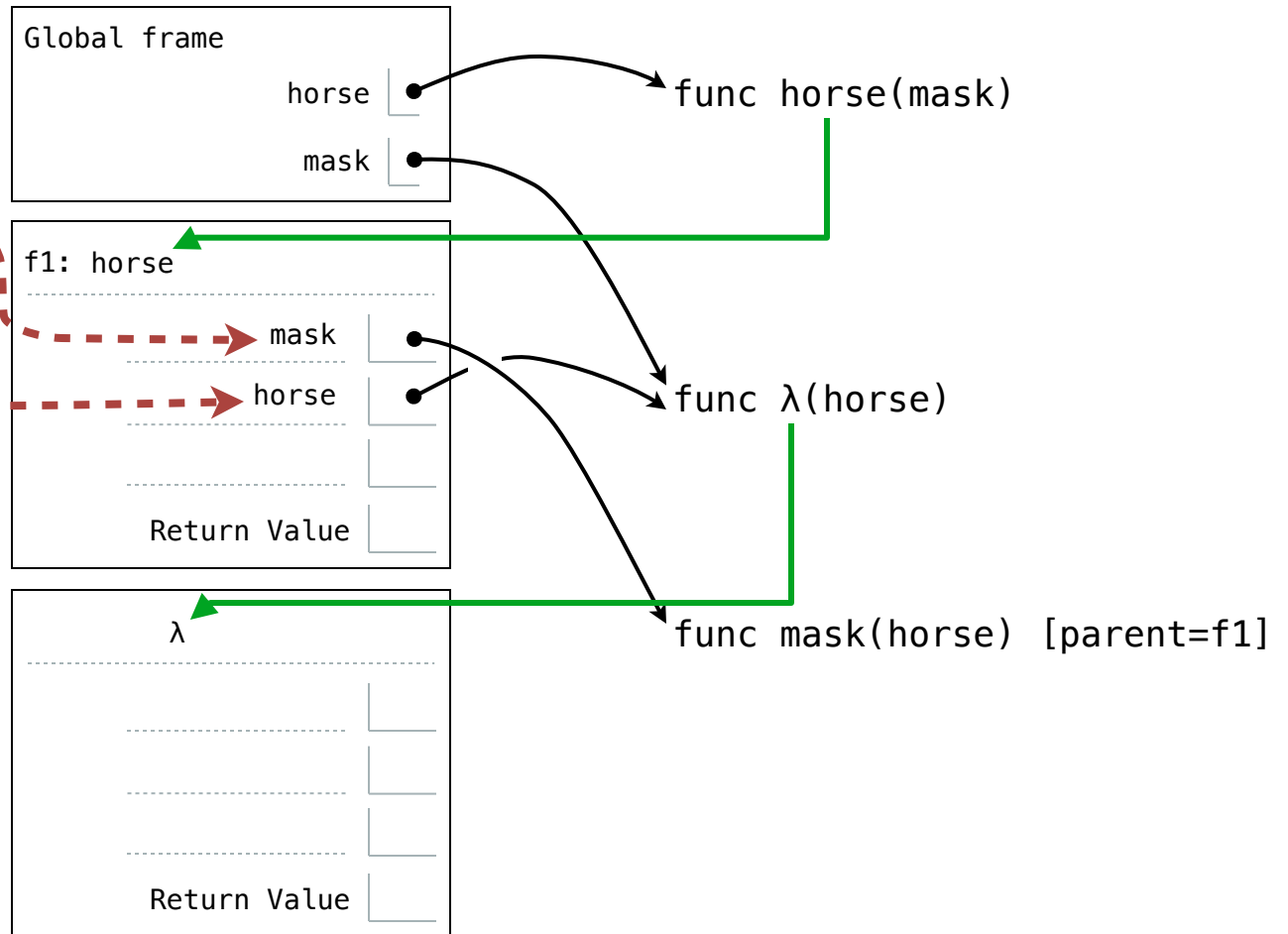
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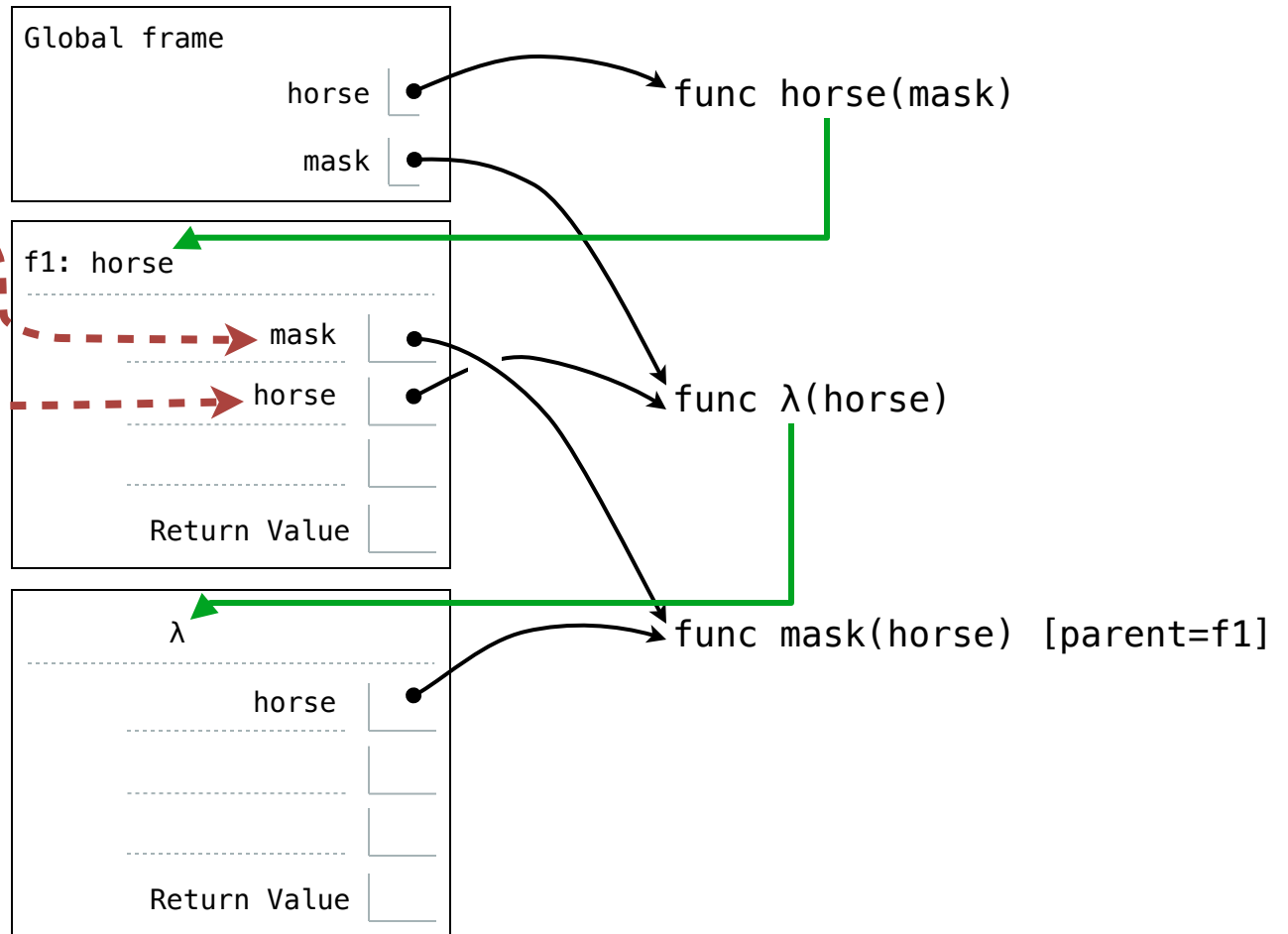
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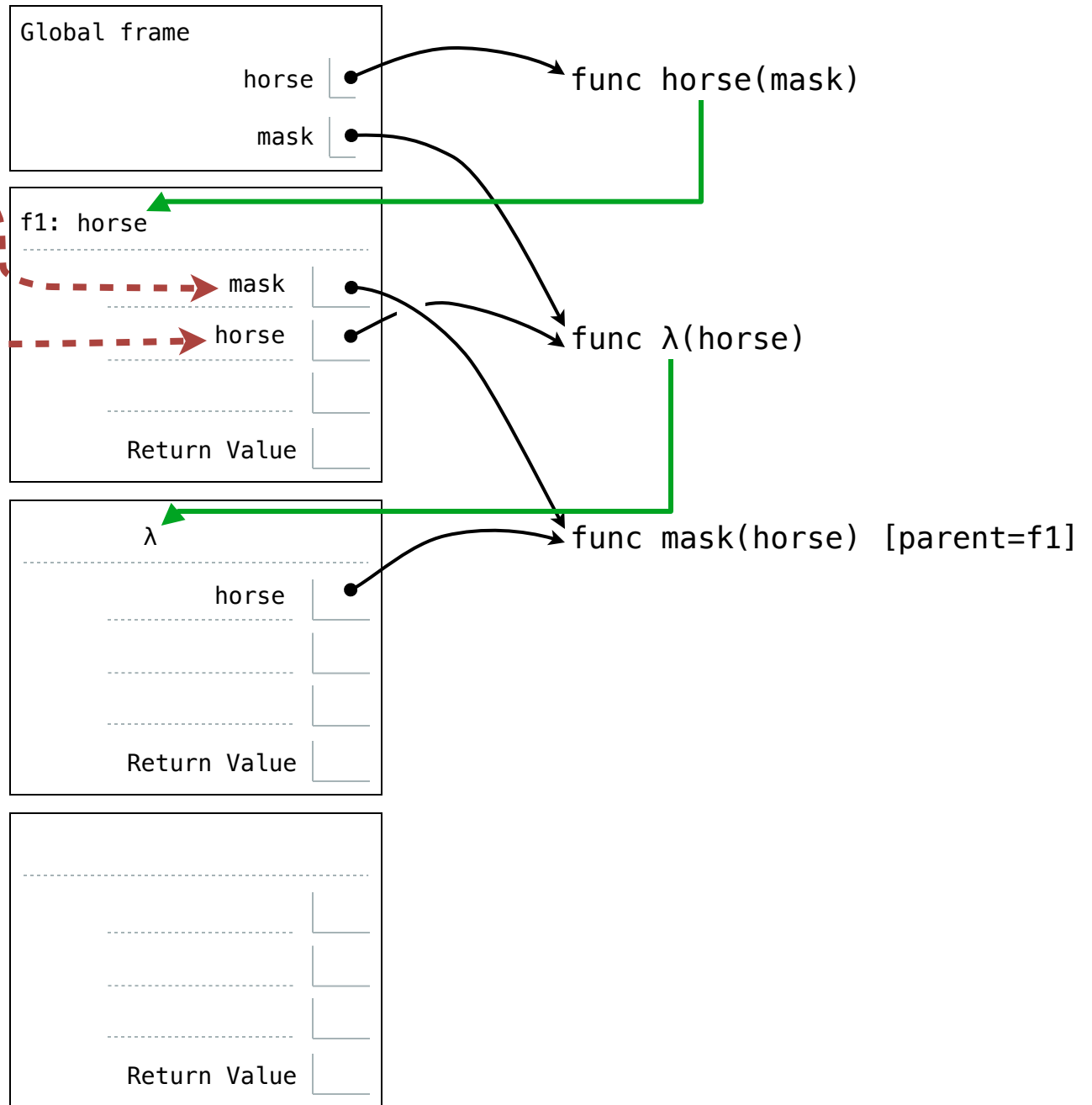
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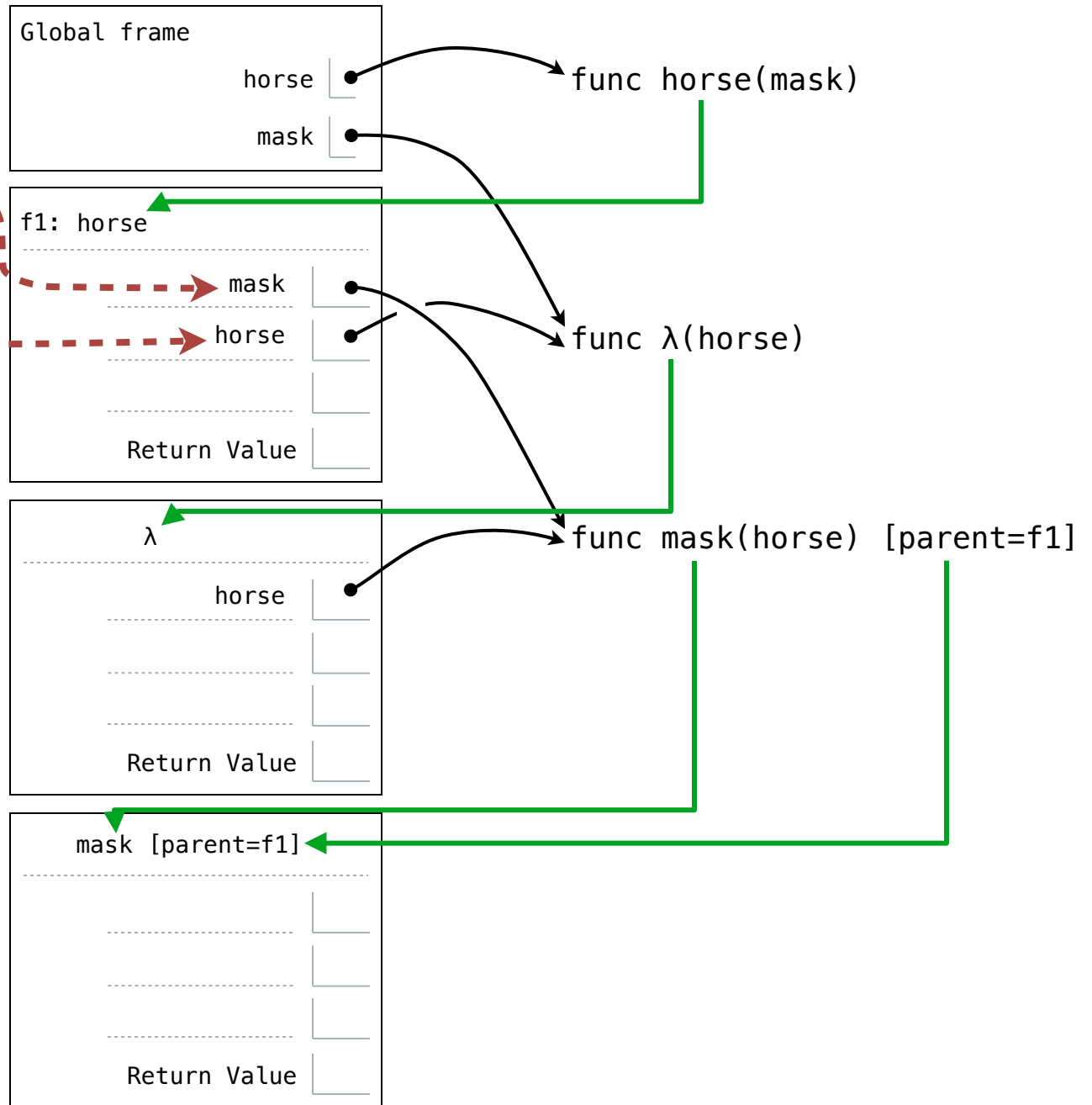
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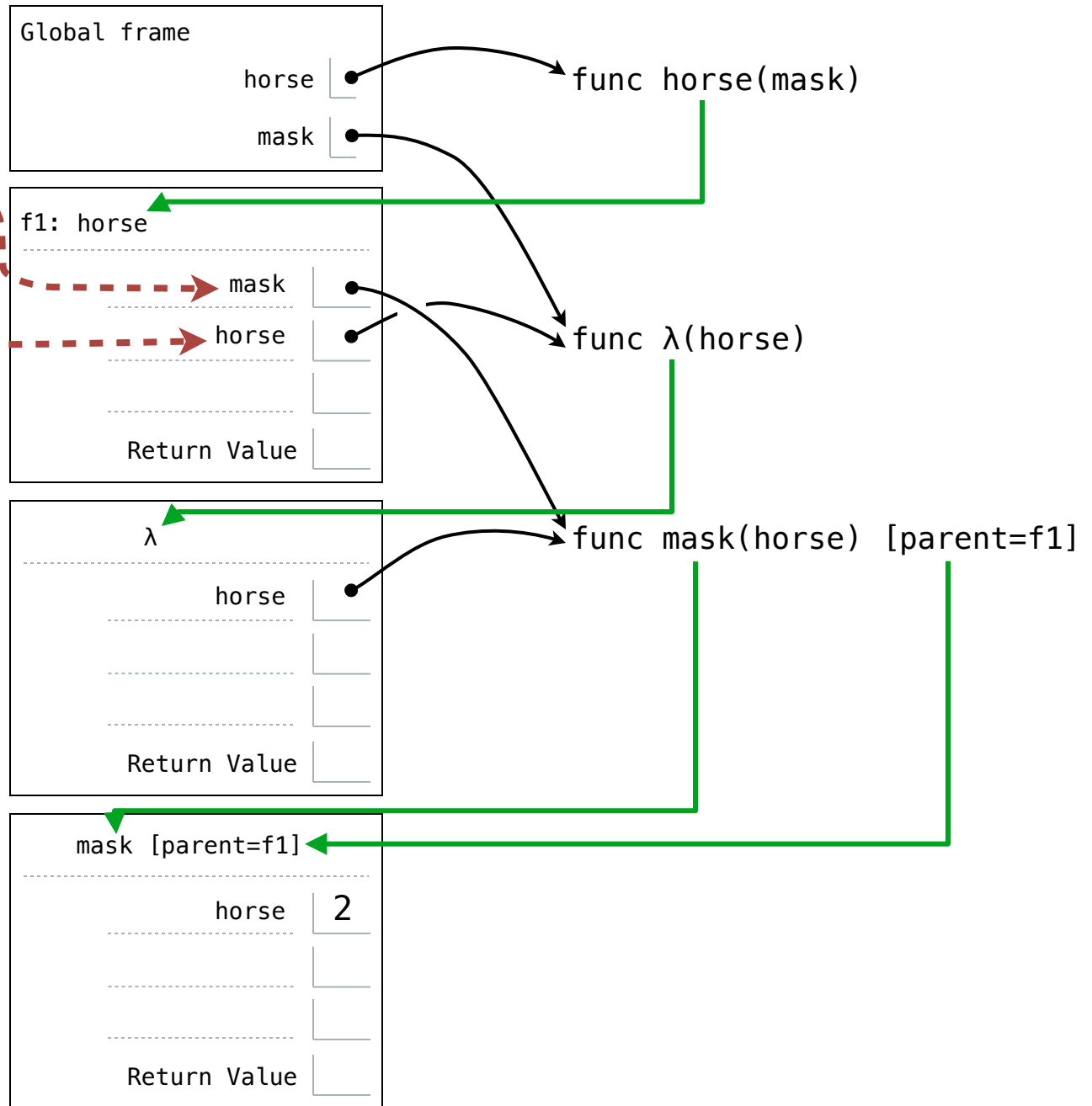
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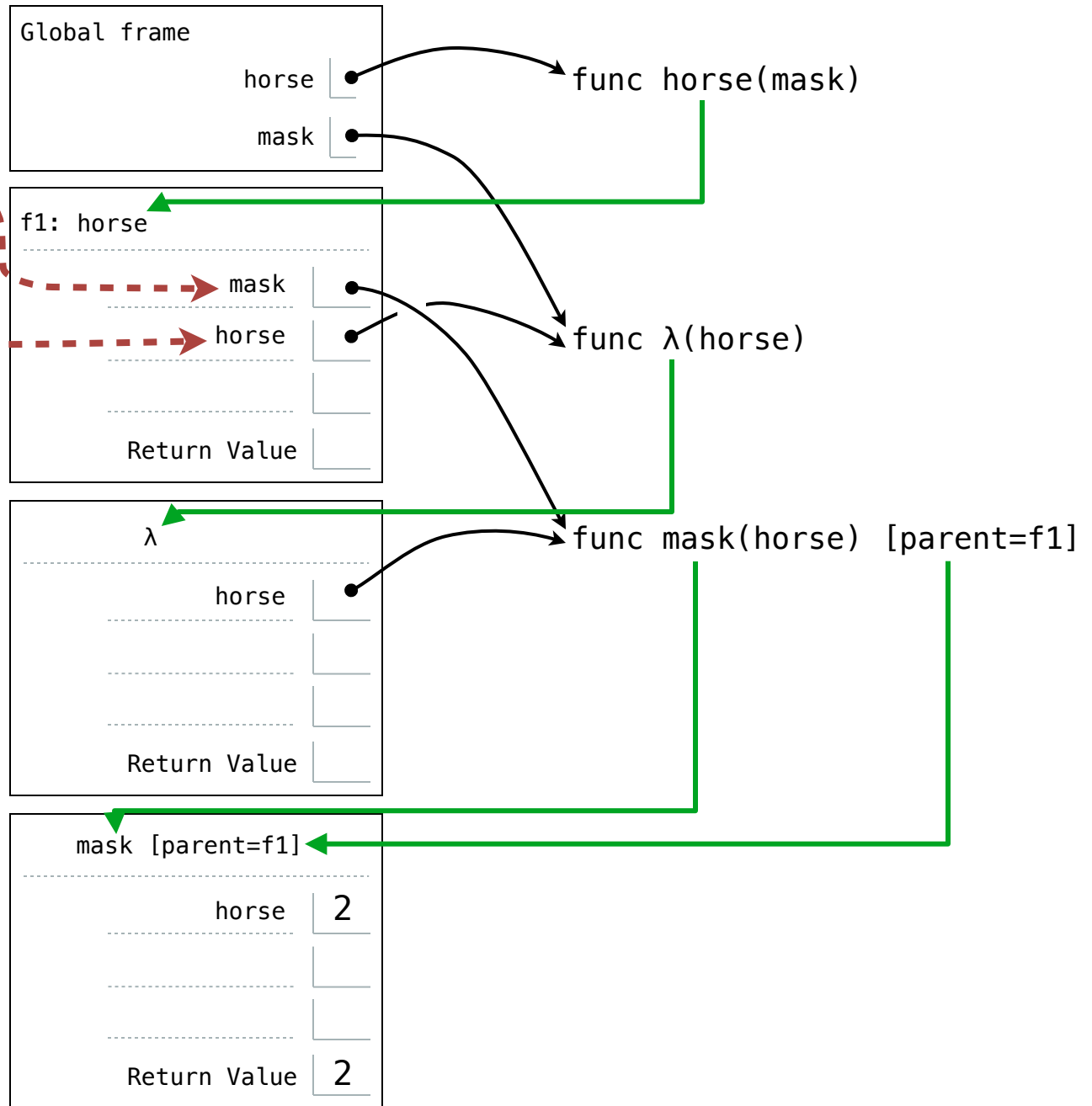
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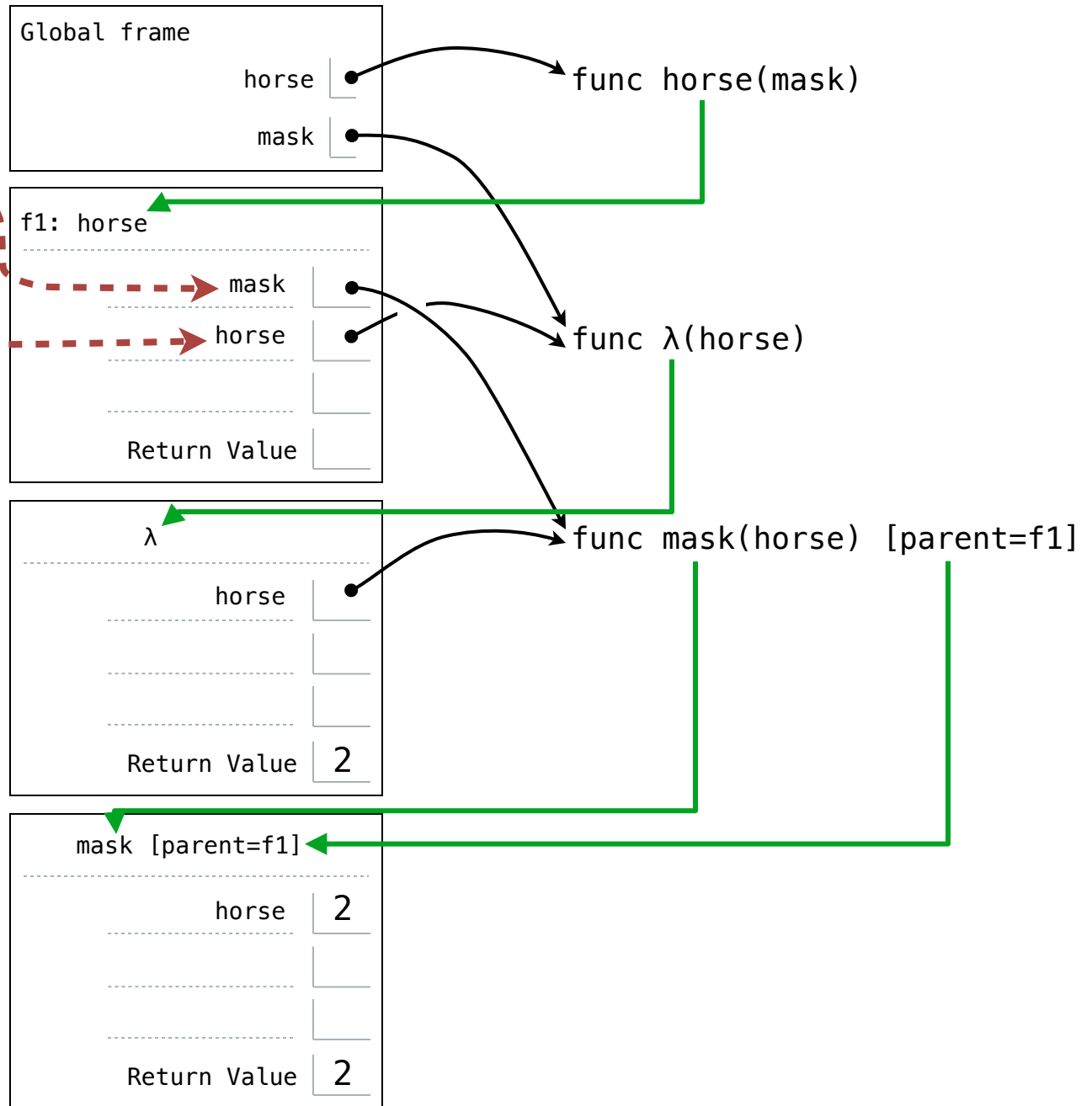
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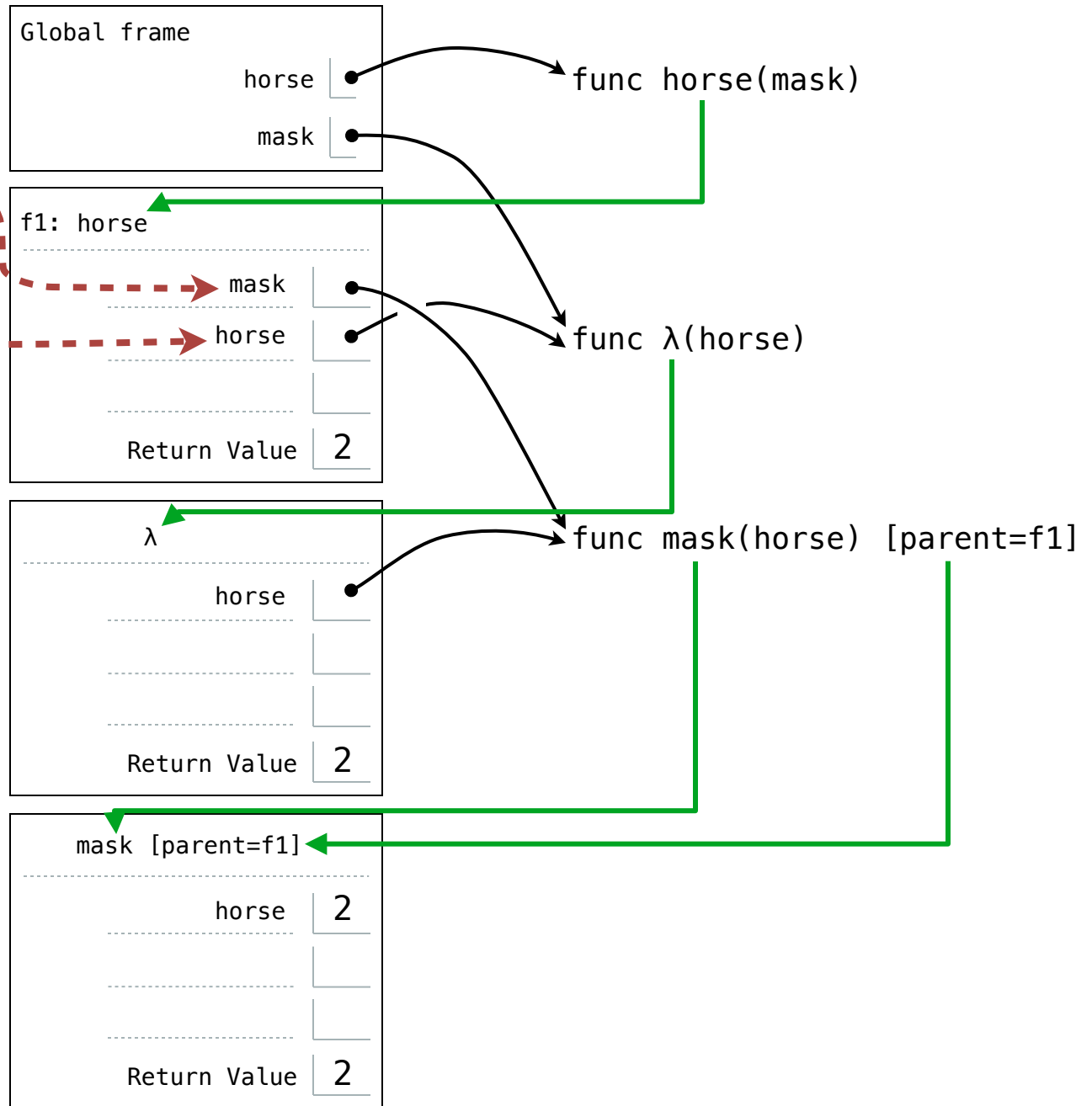
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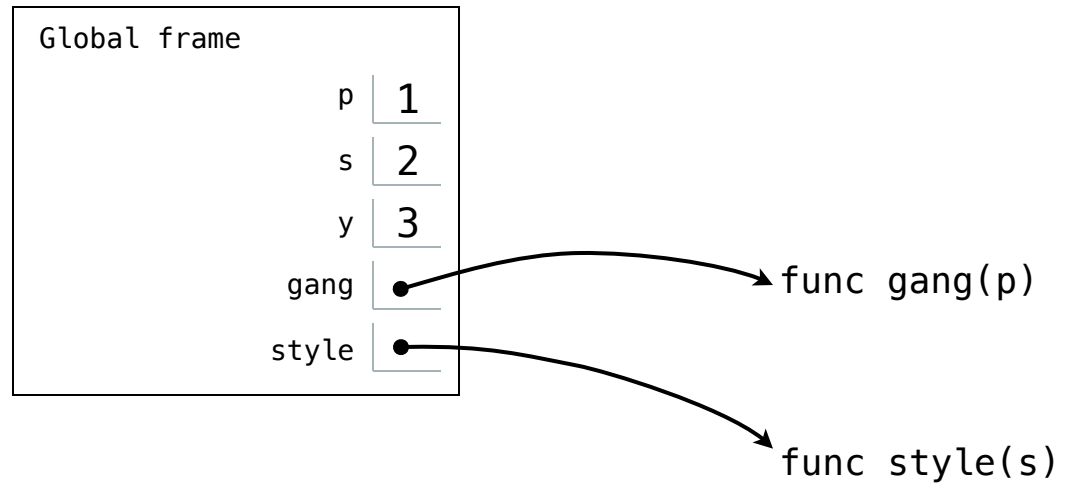


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def gang(p):  
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gang(3)
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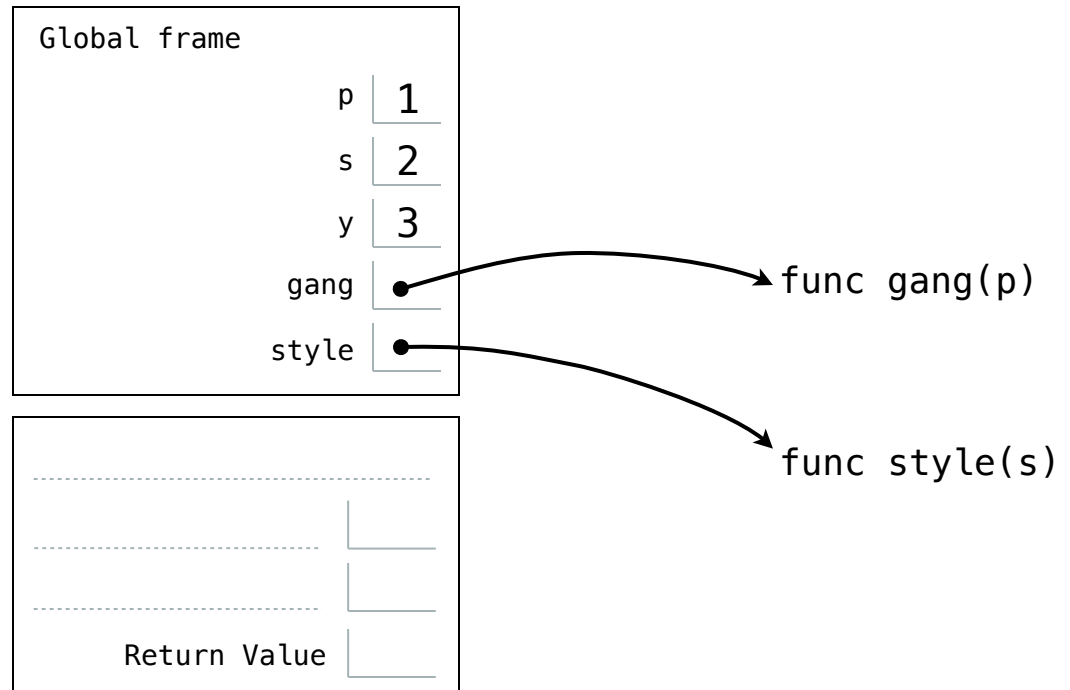


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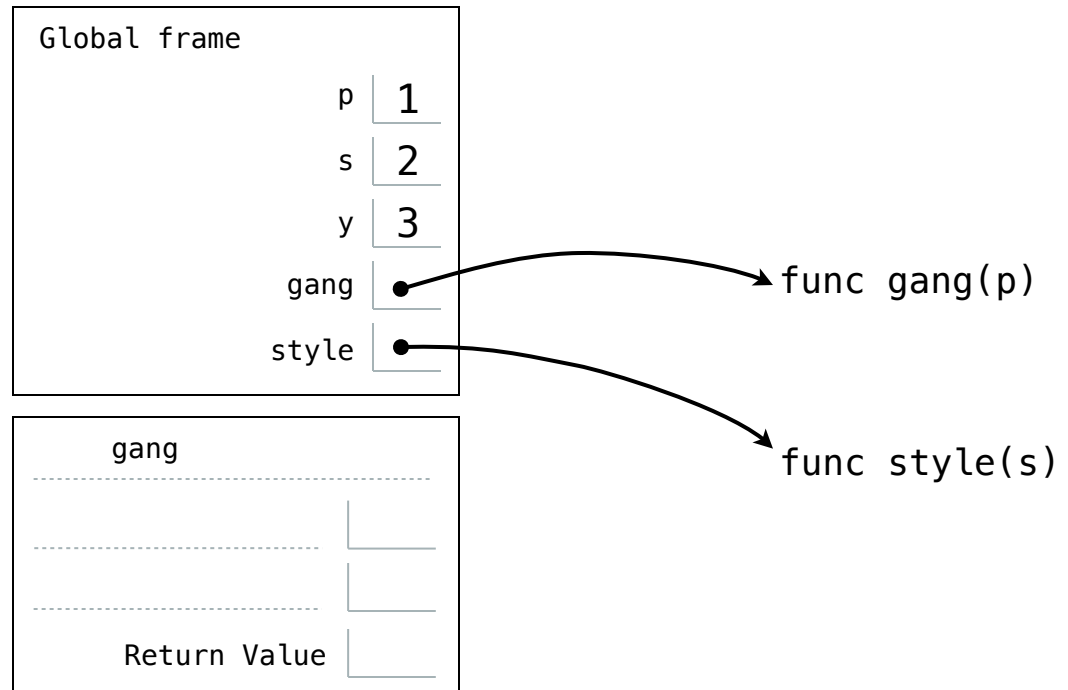


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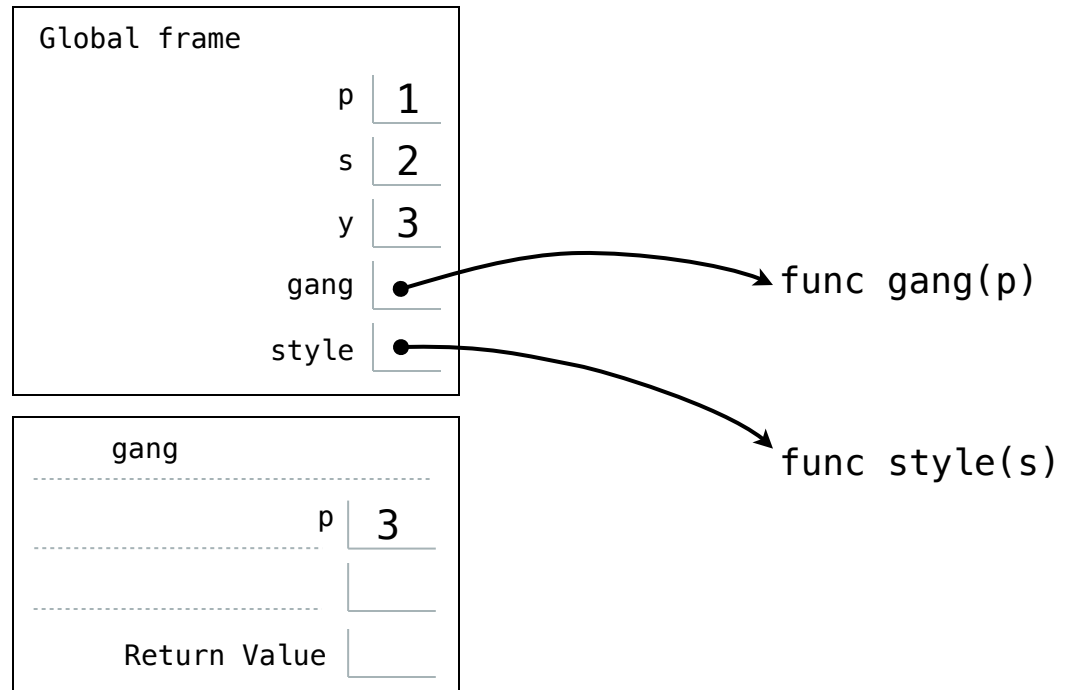


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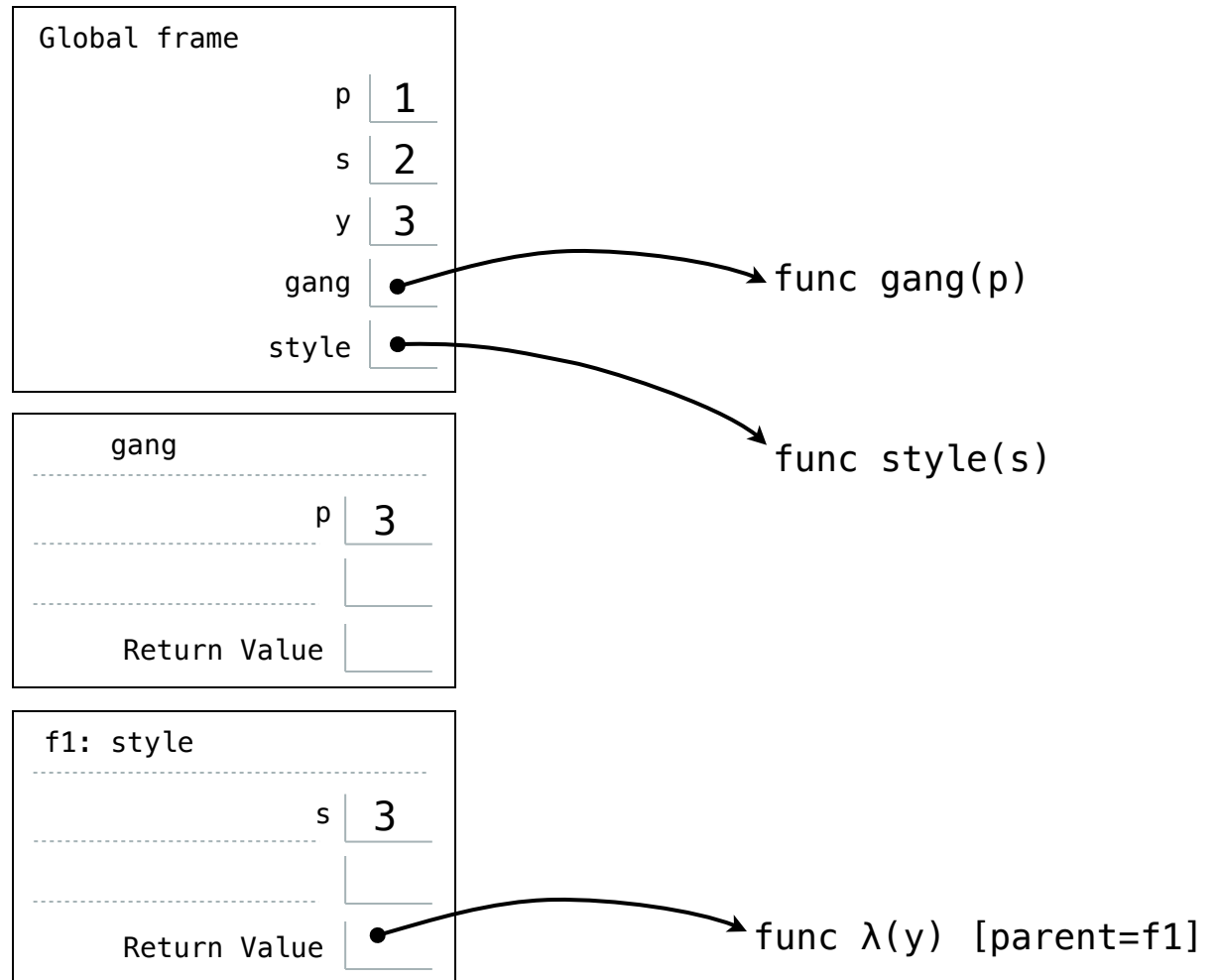


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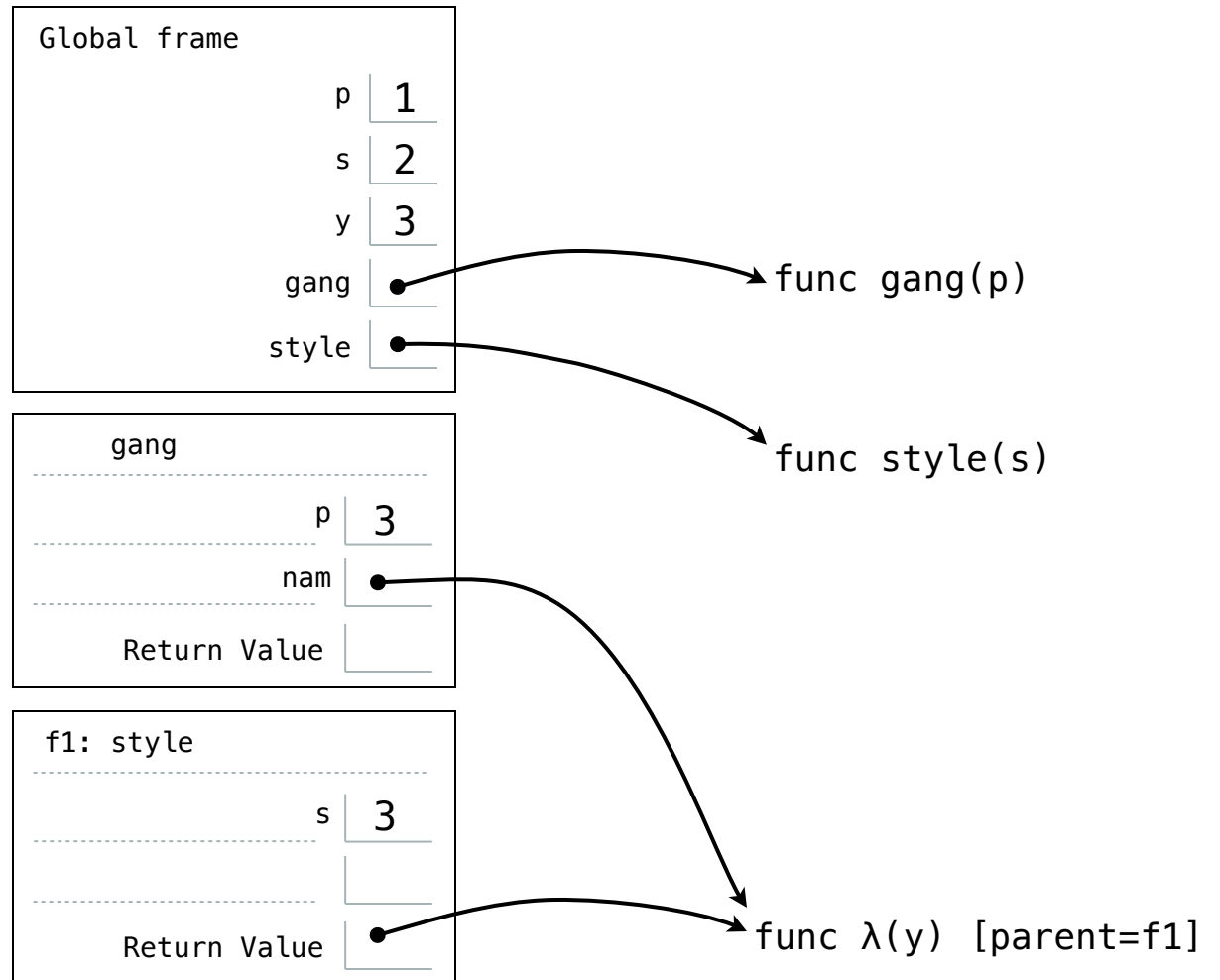



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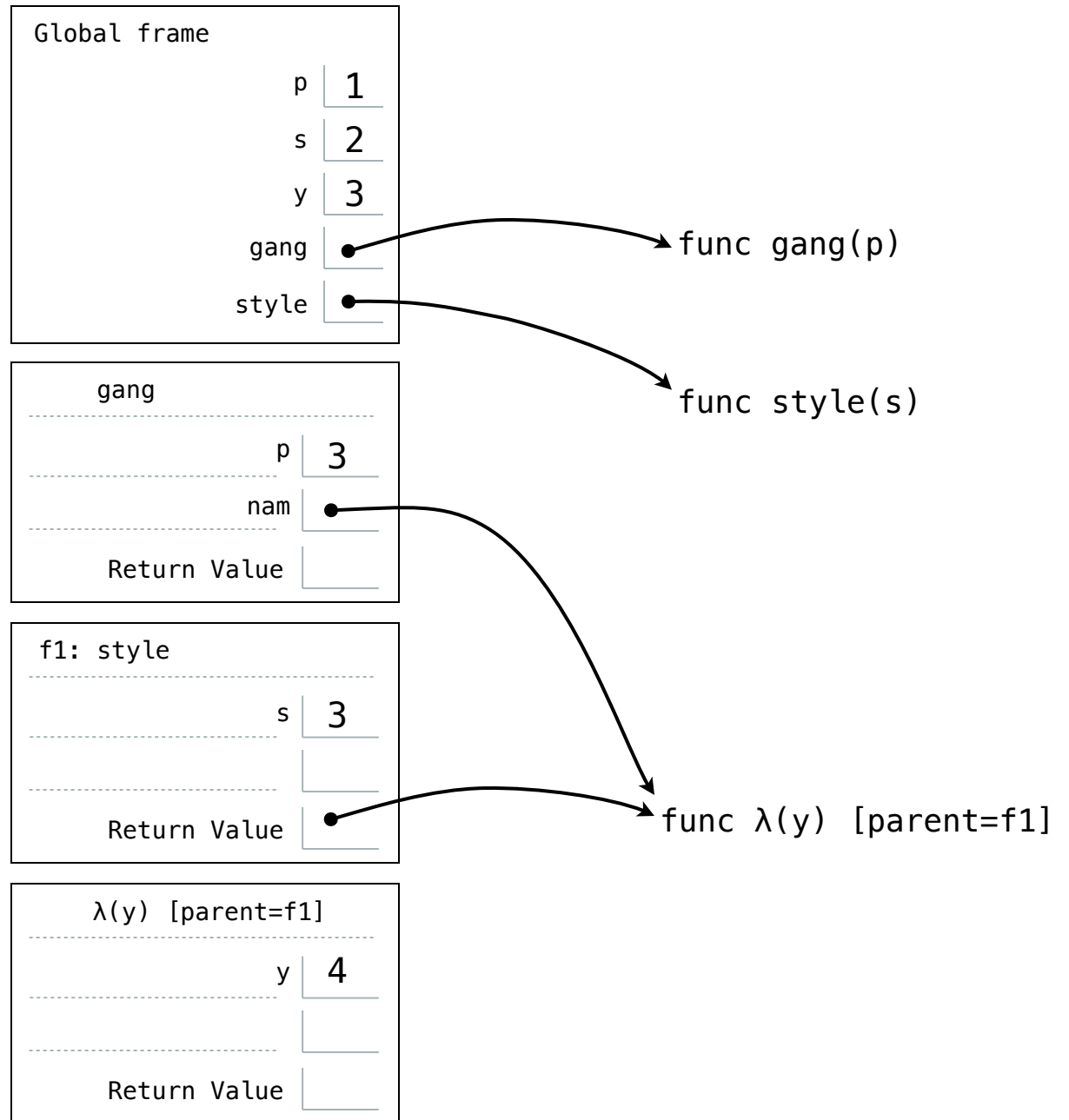


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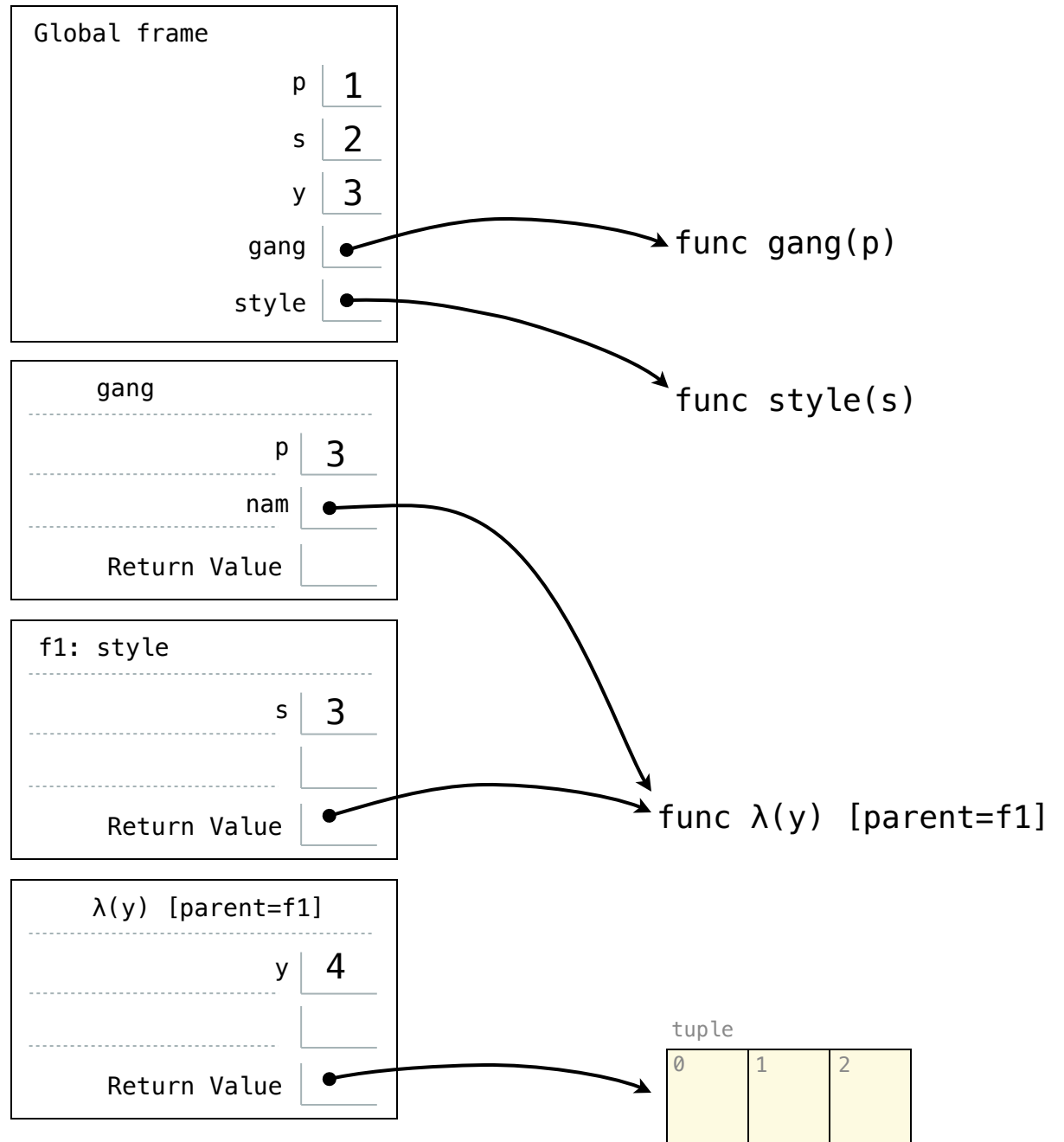


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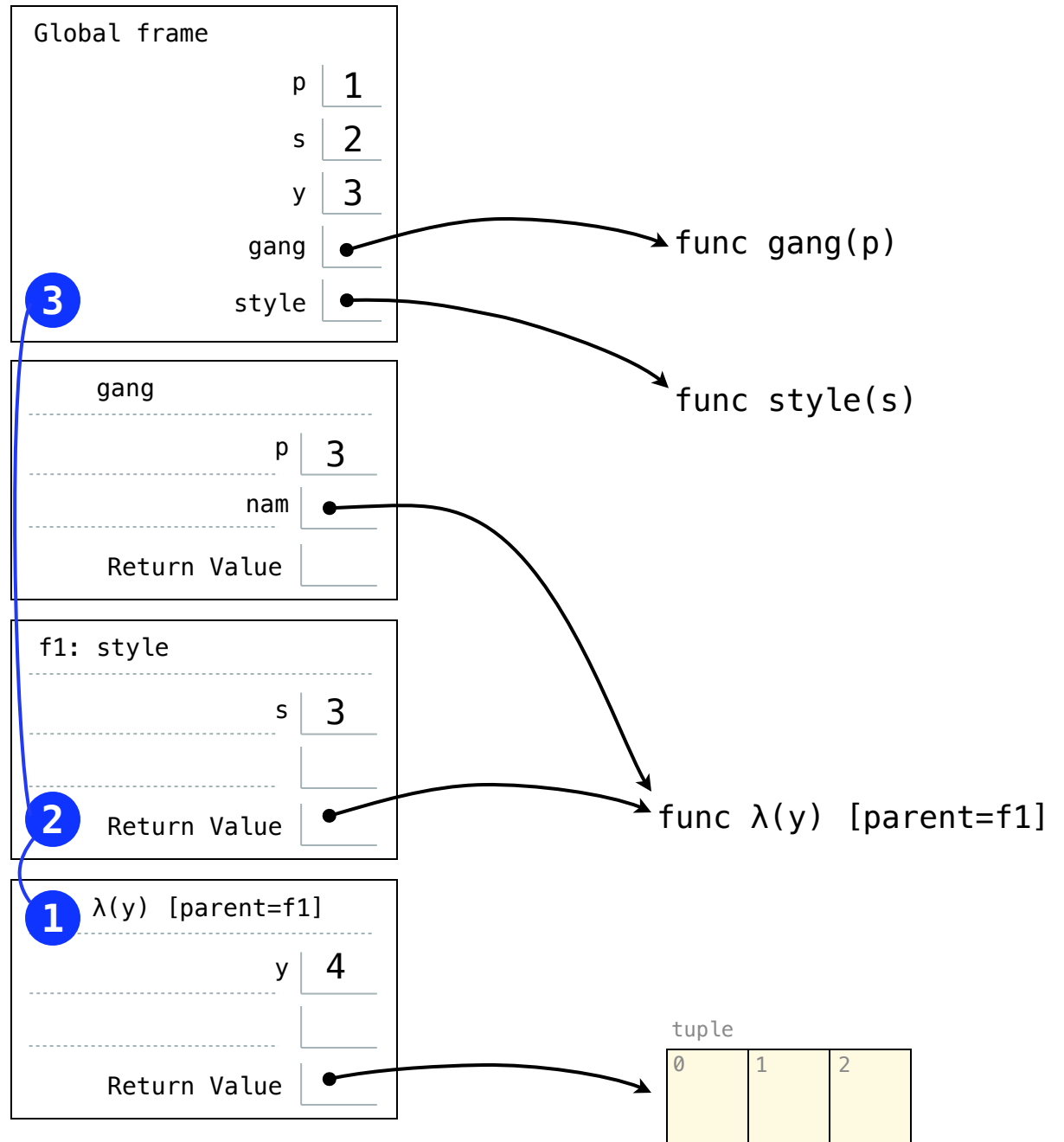


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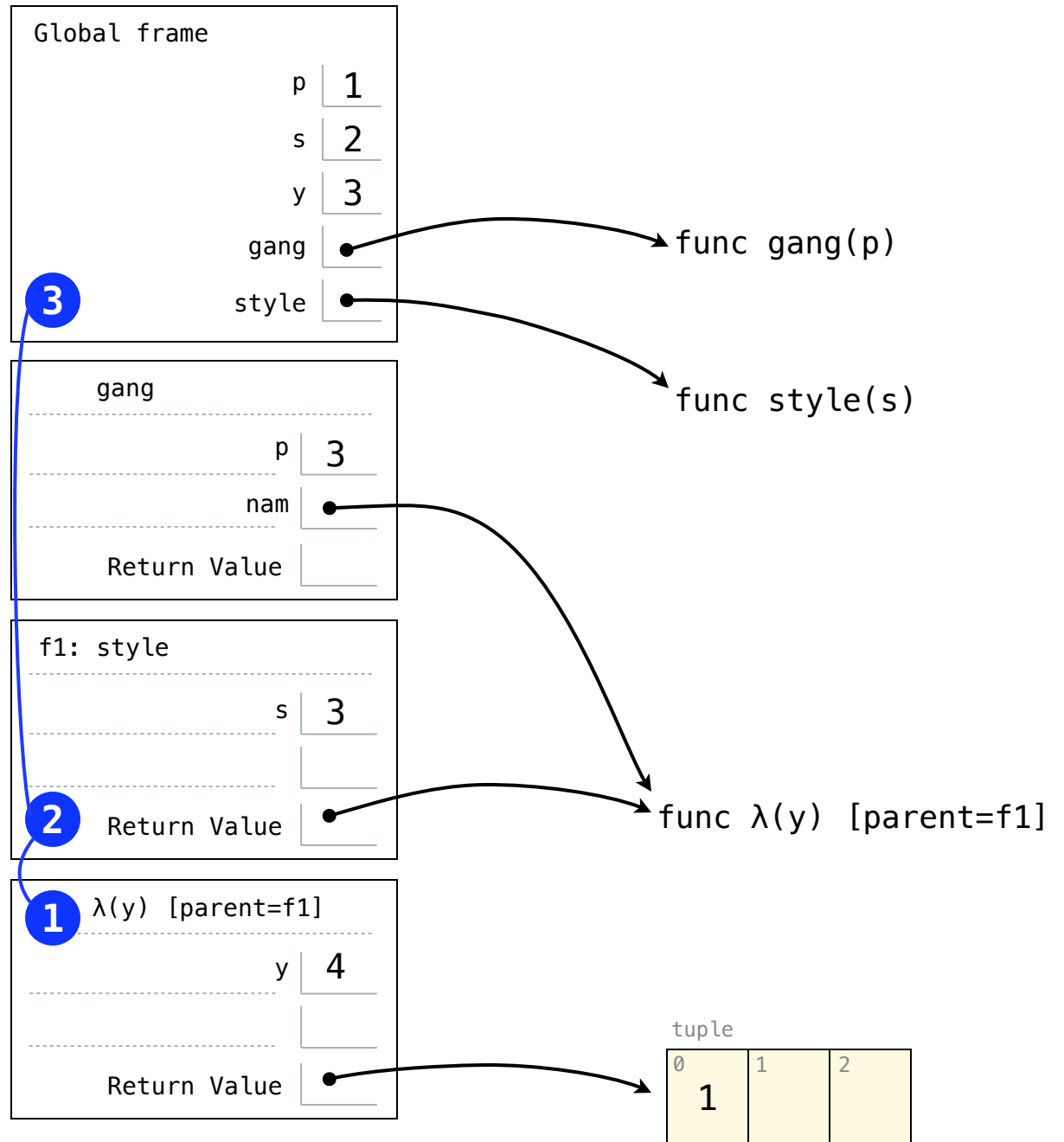


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p, s, y = 1, 2, 3
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def gang(p):  
    nam = style(p)  
    return (nam(4), 5)
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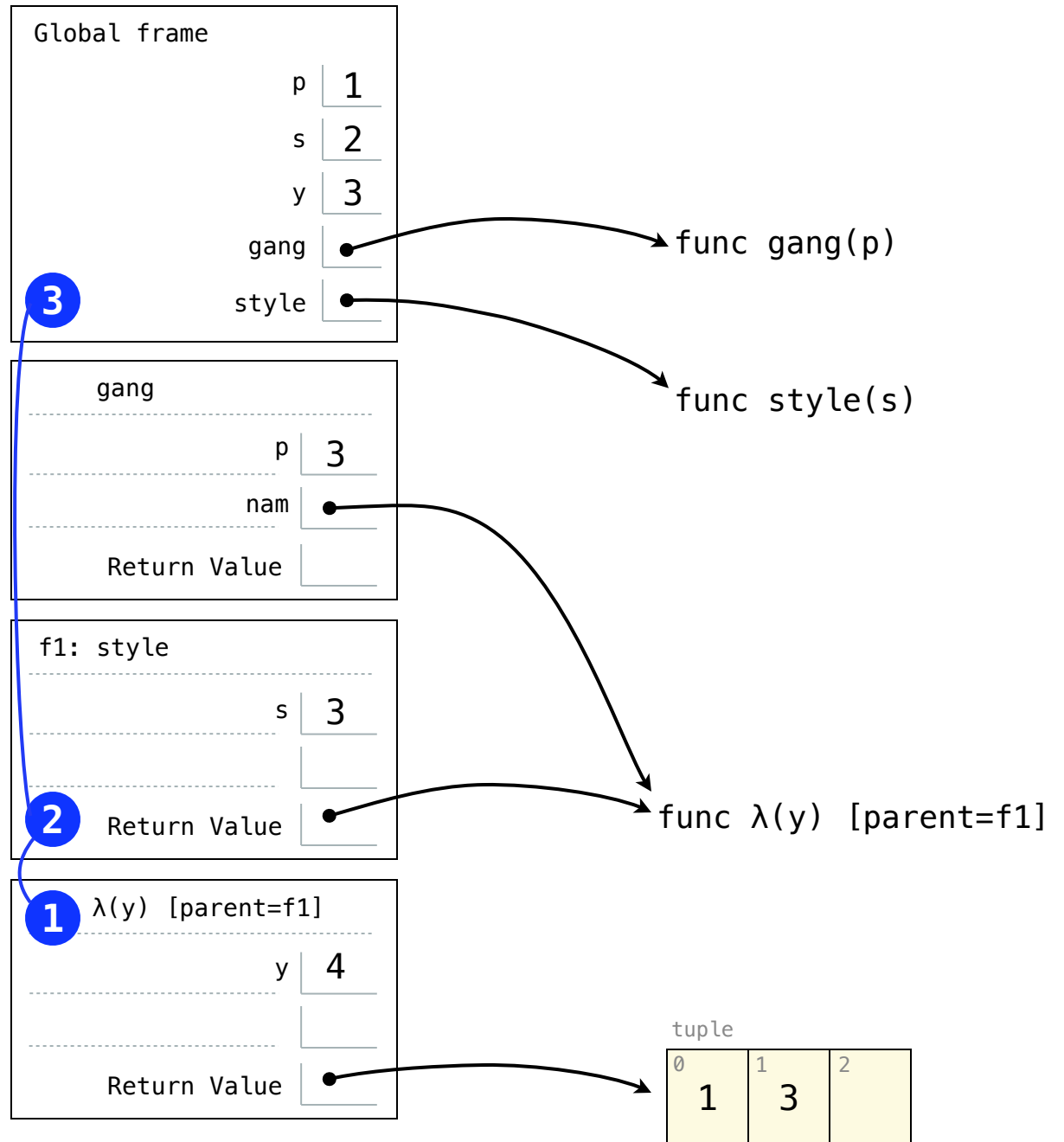


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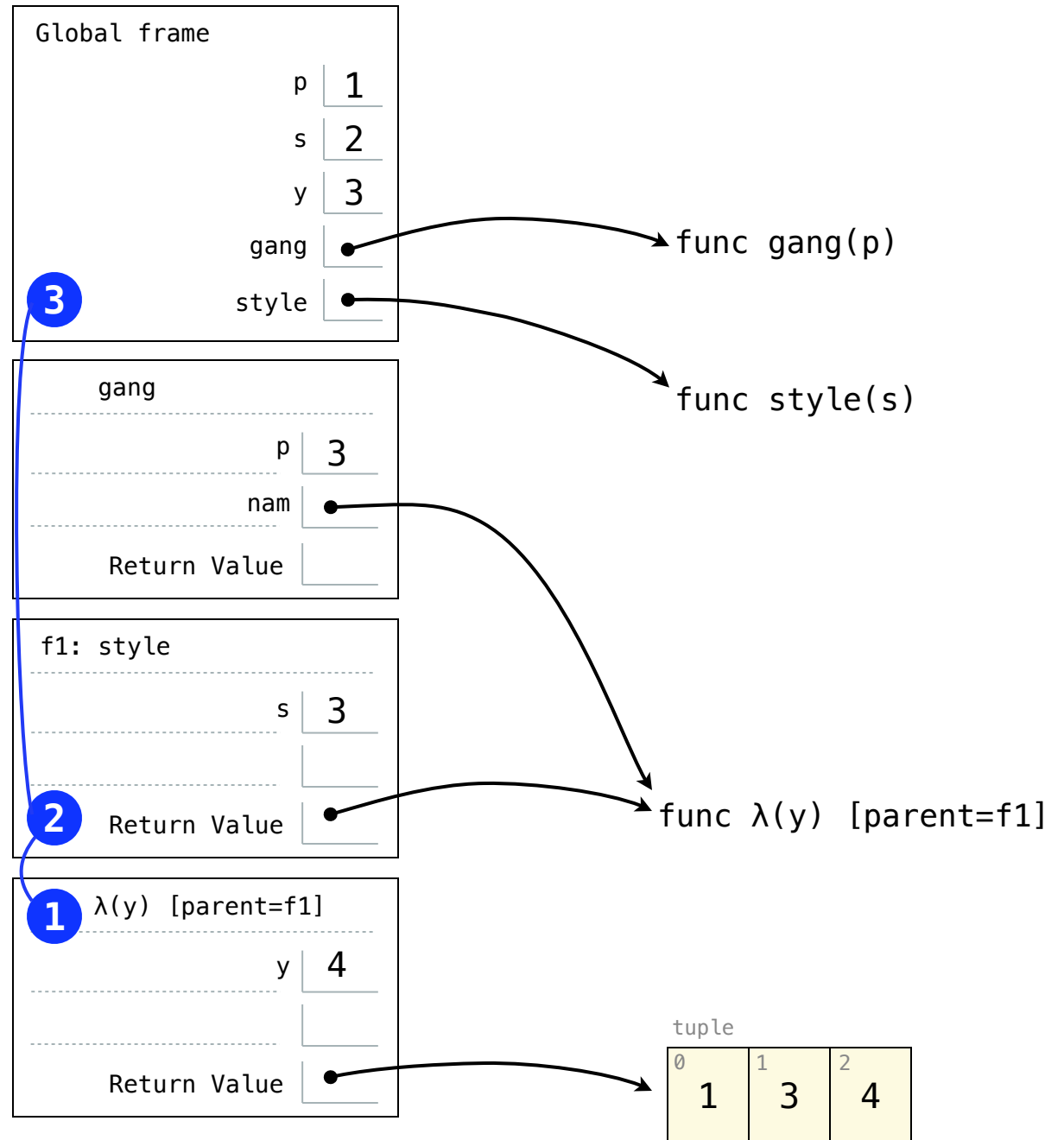


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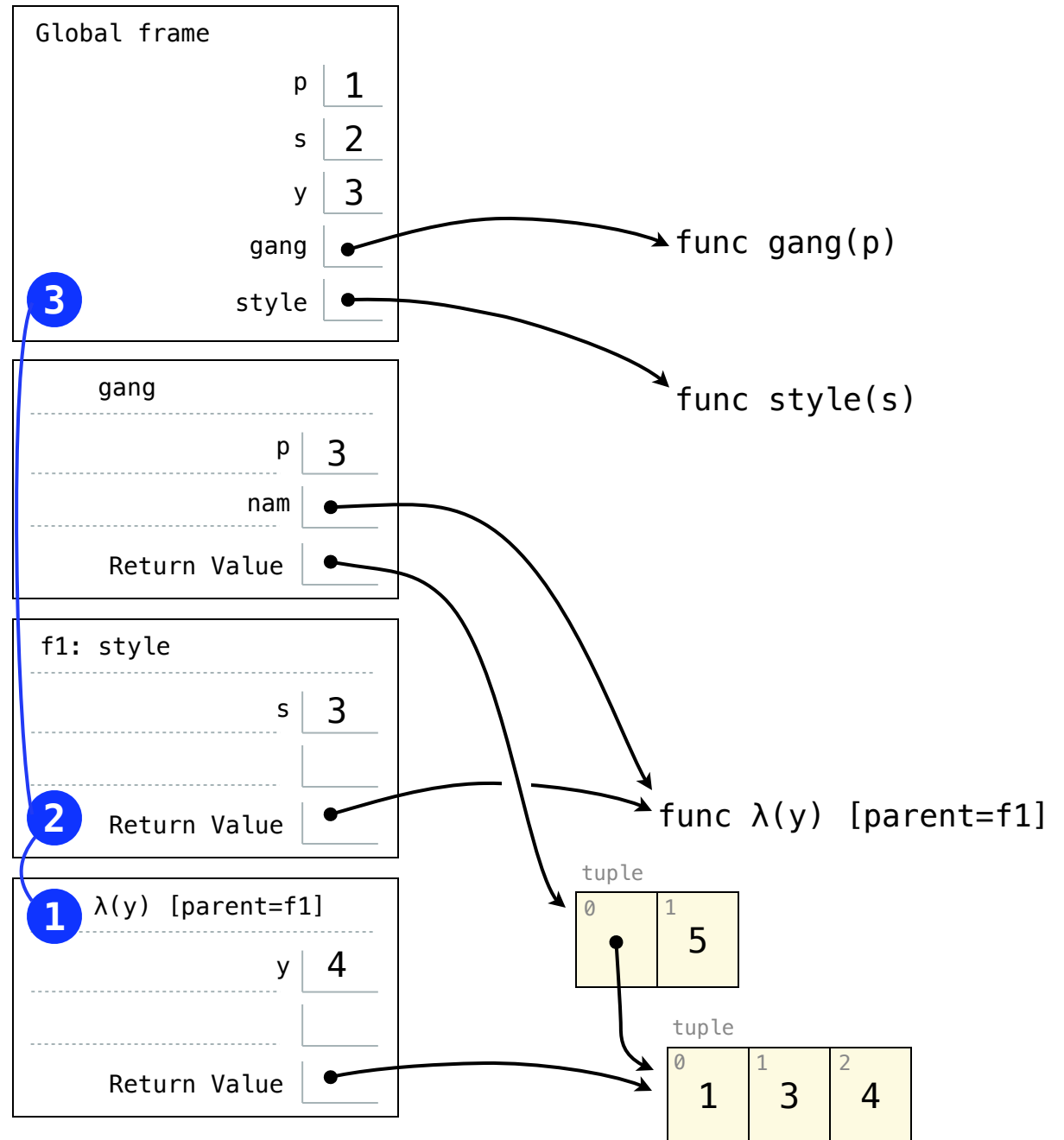


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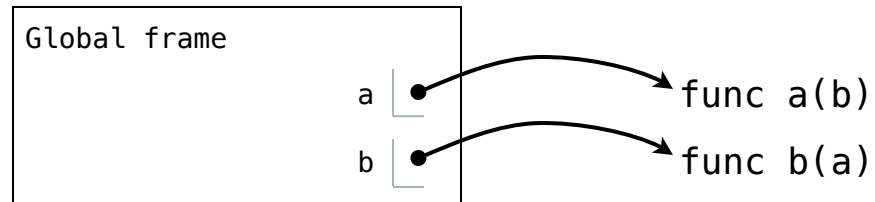
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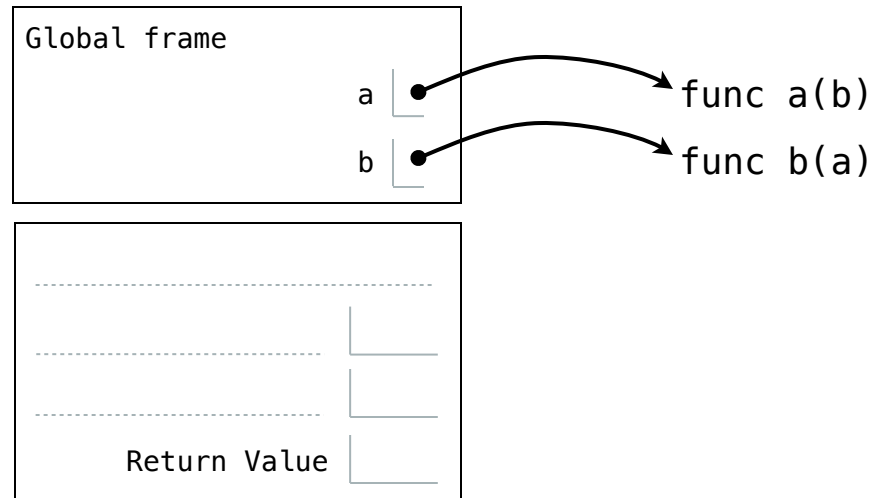
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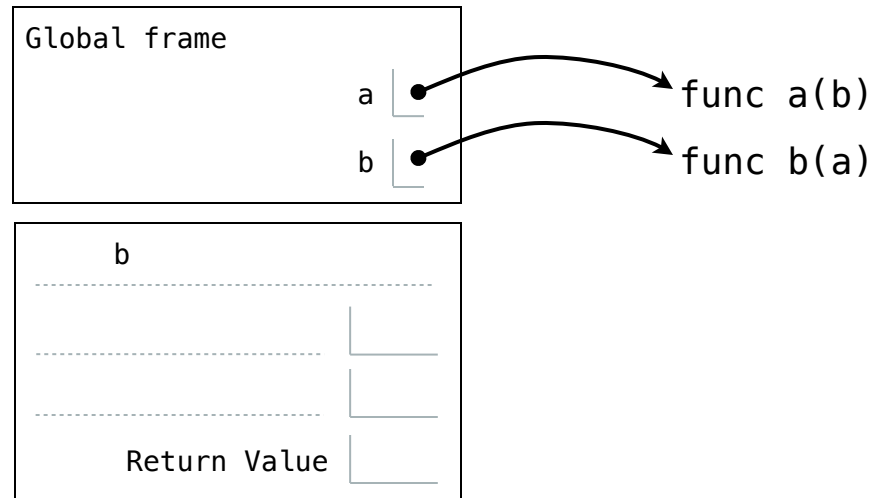
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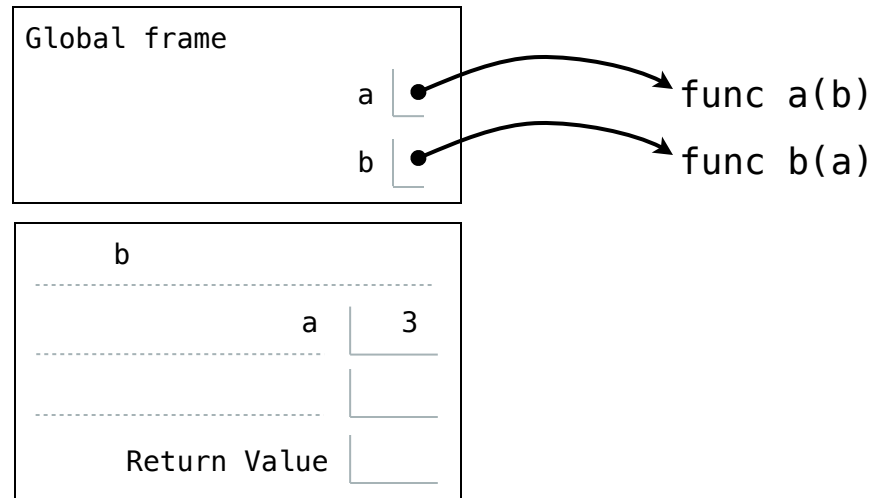
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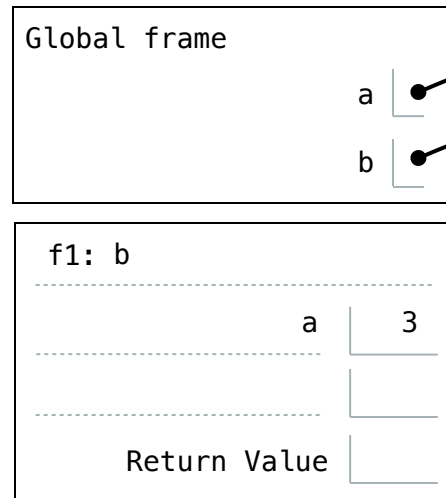
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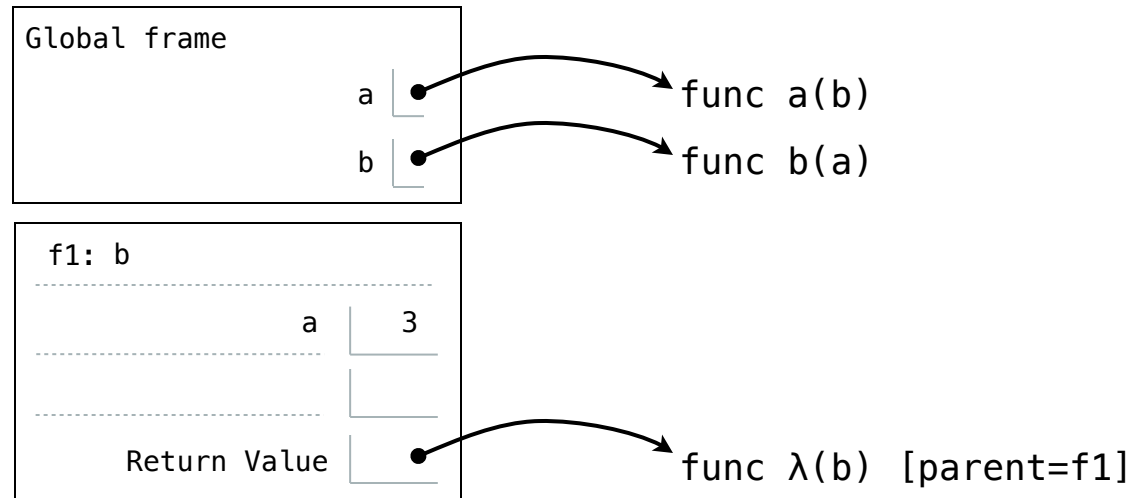


```
func λ(b) [parent=f1]
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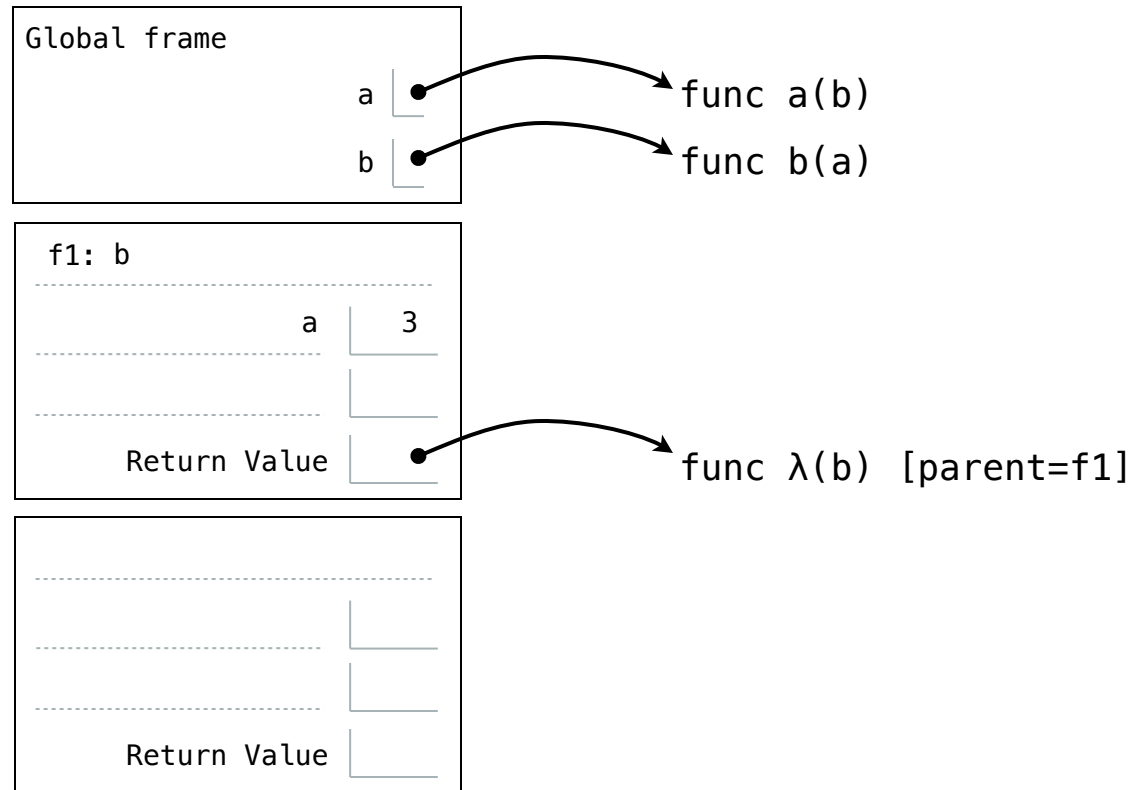
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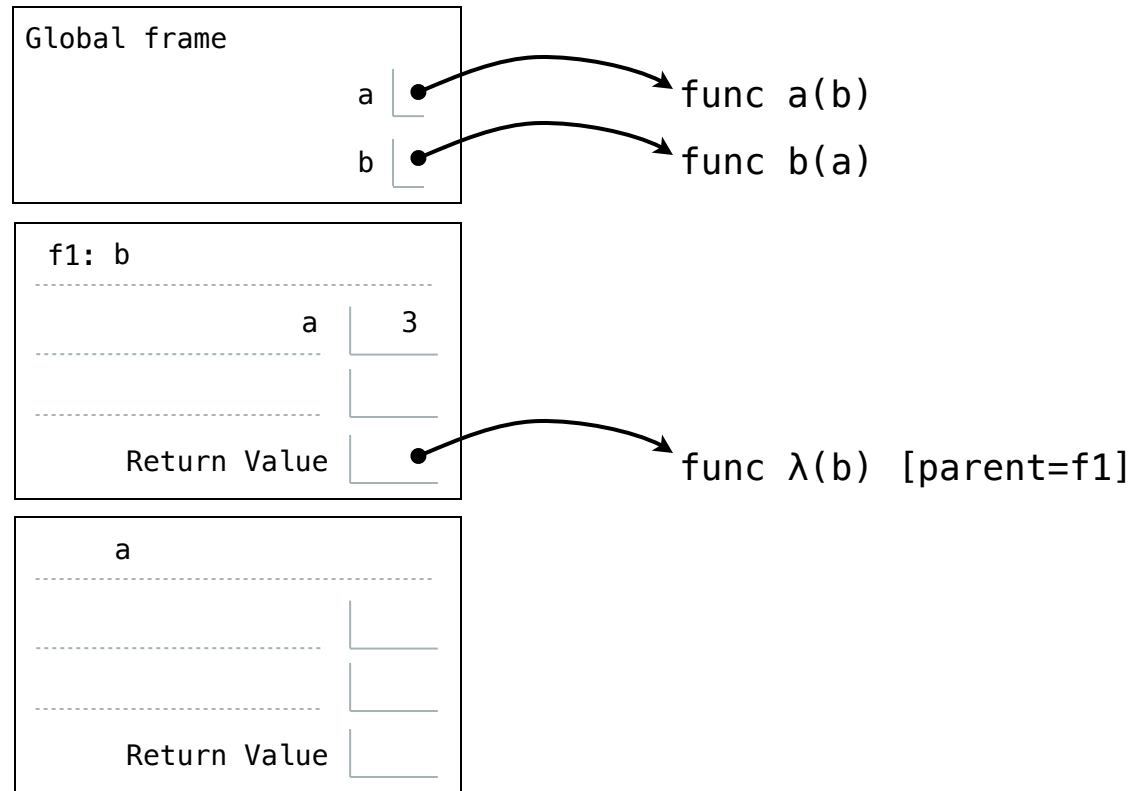
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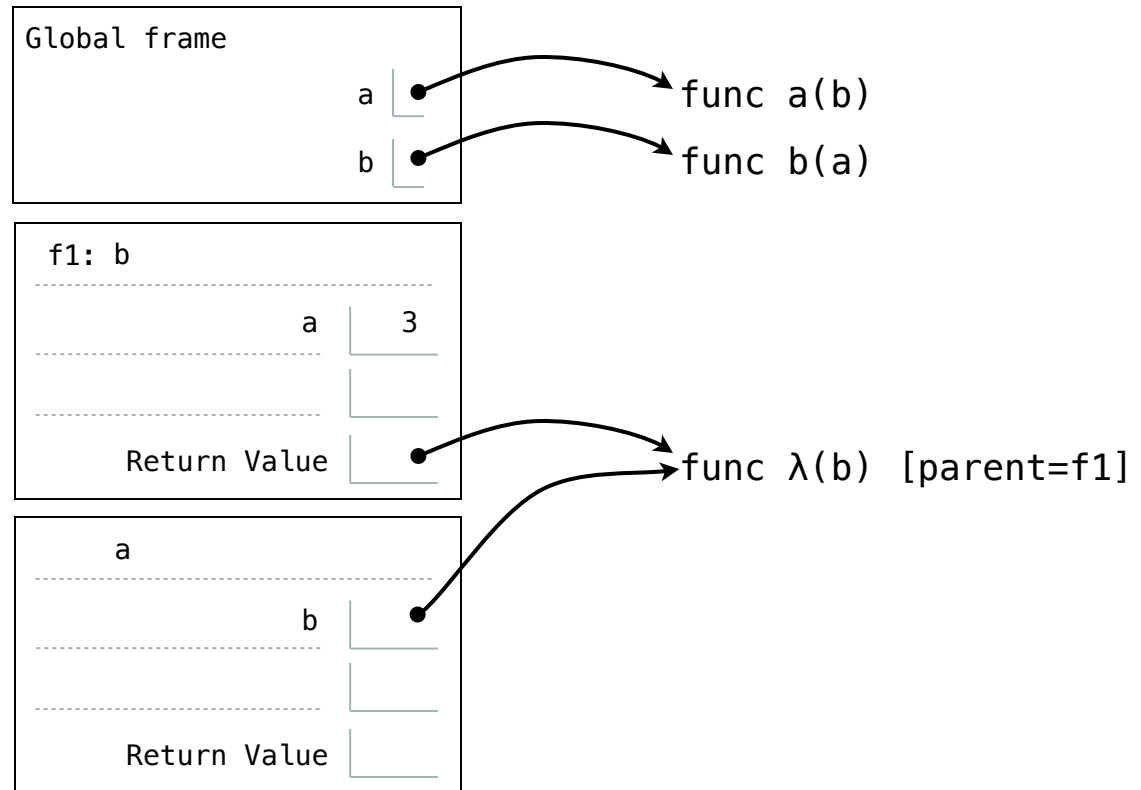
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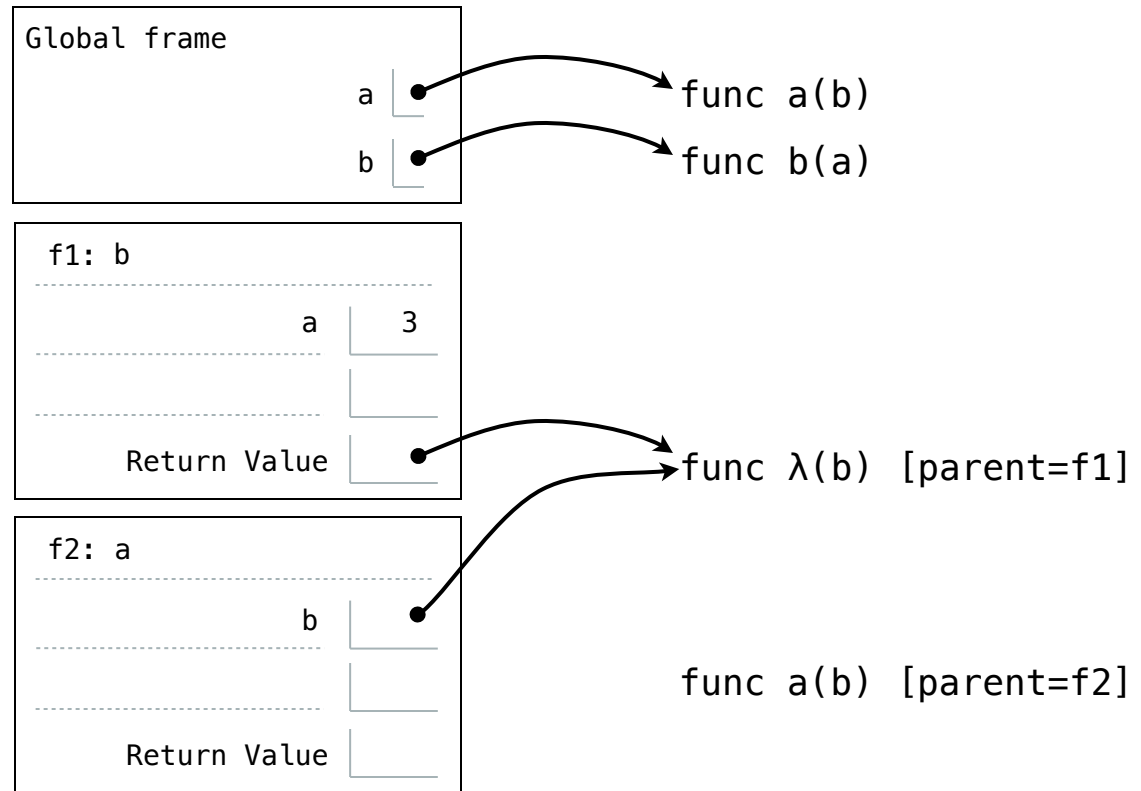
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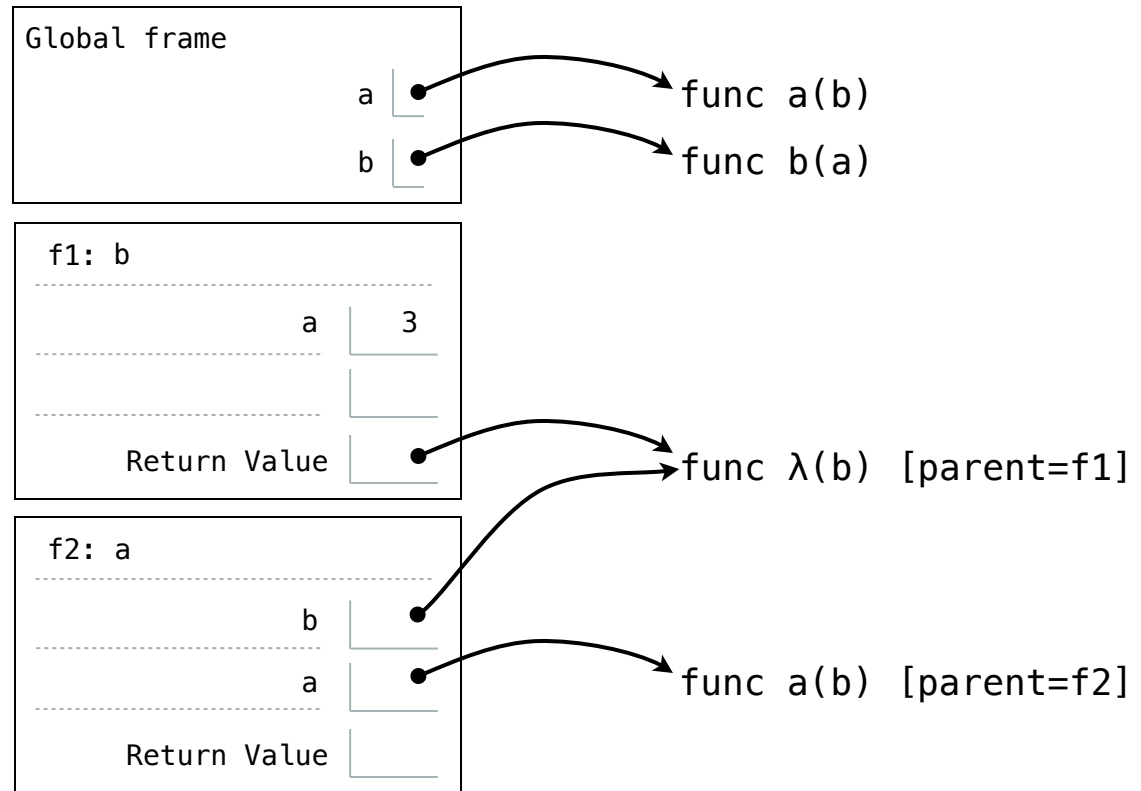
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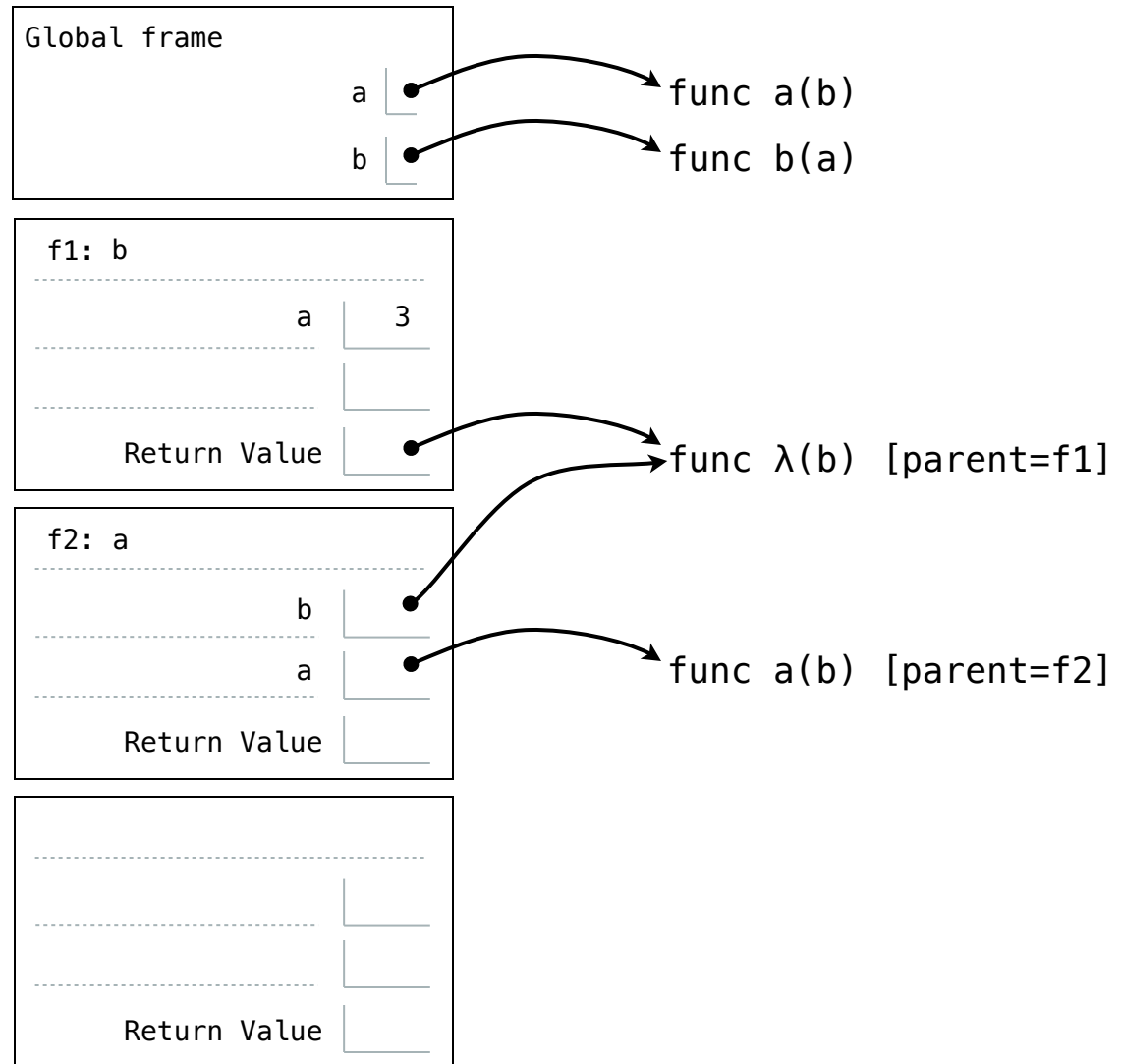
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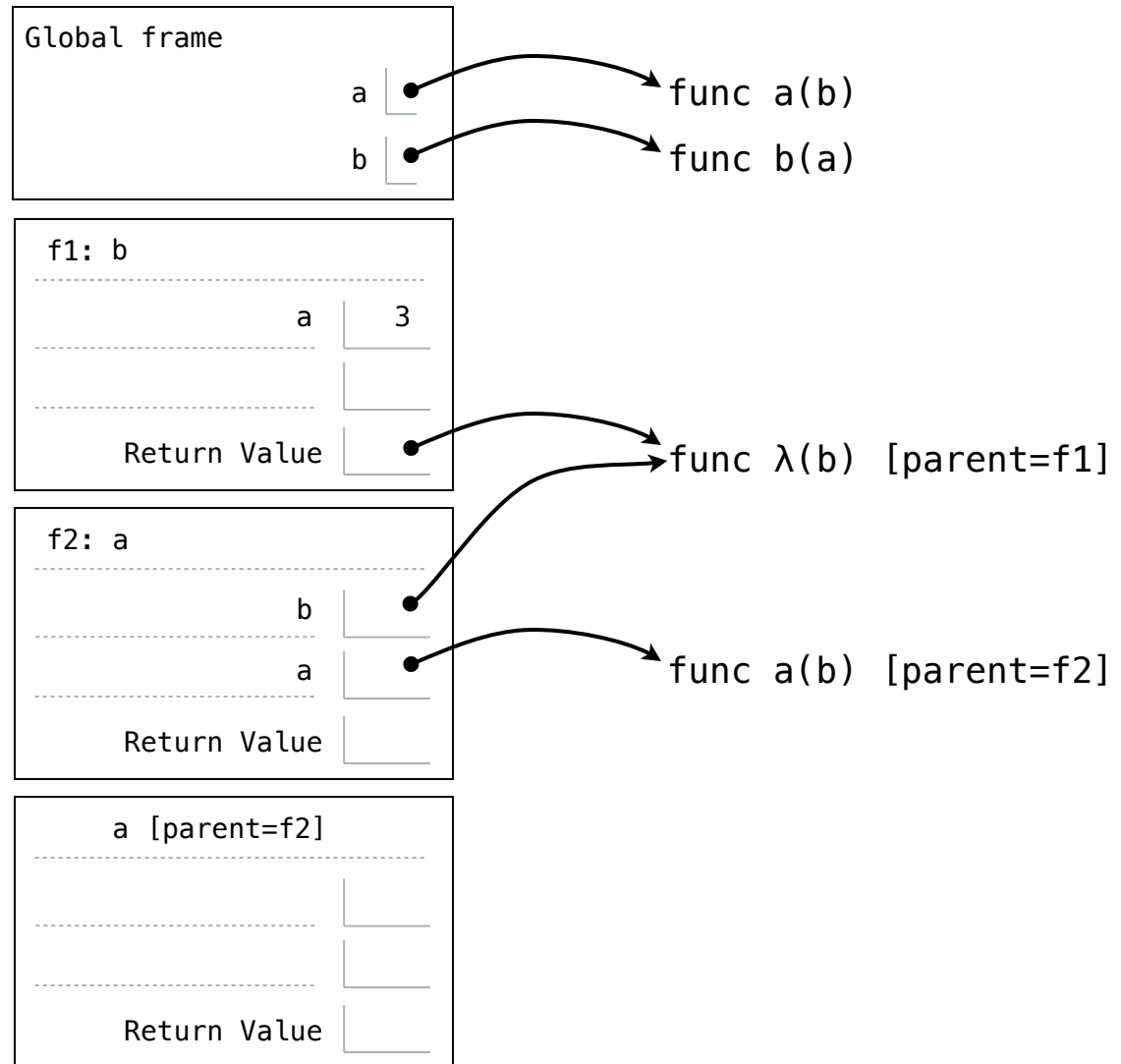
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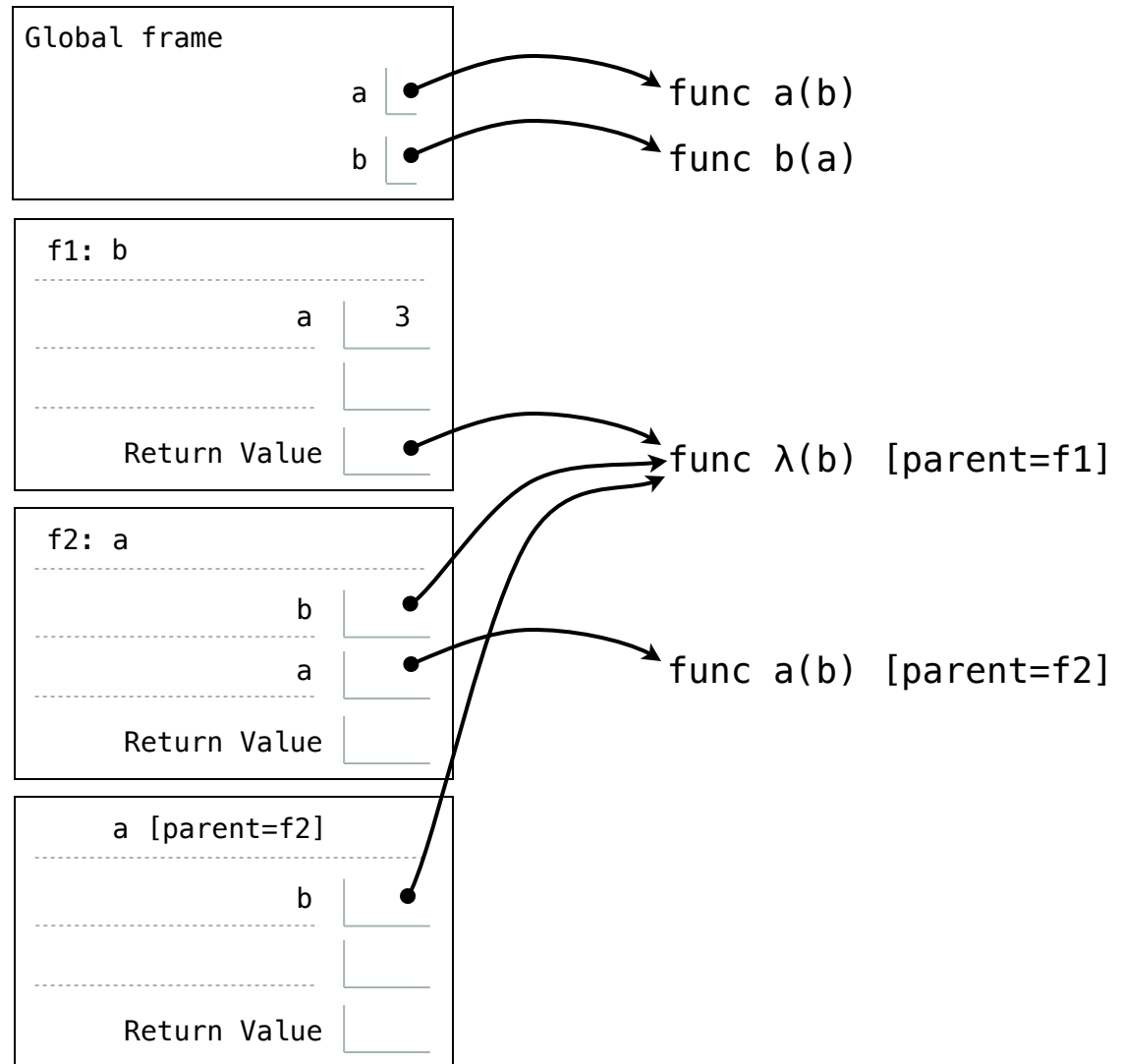
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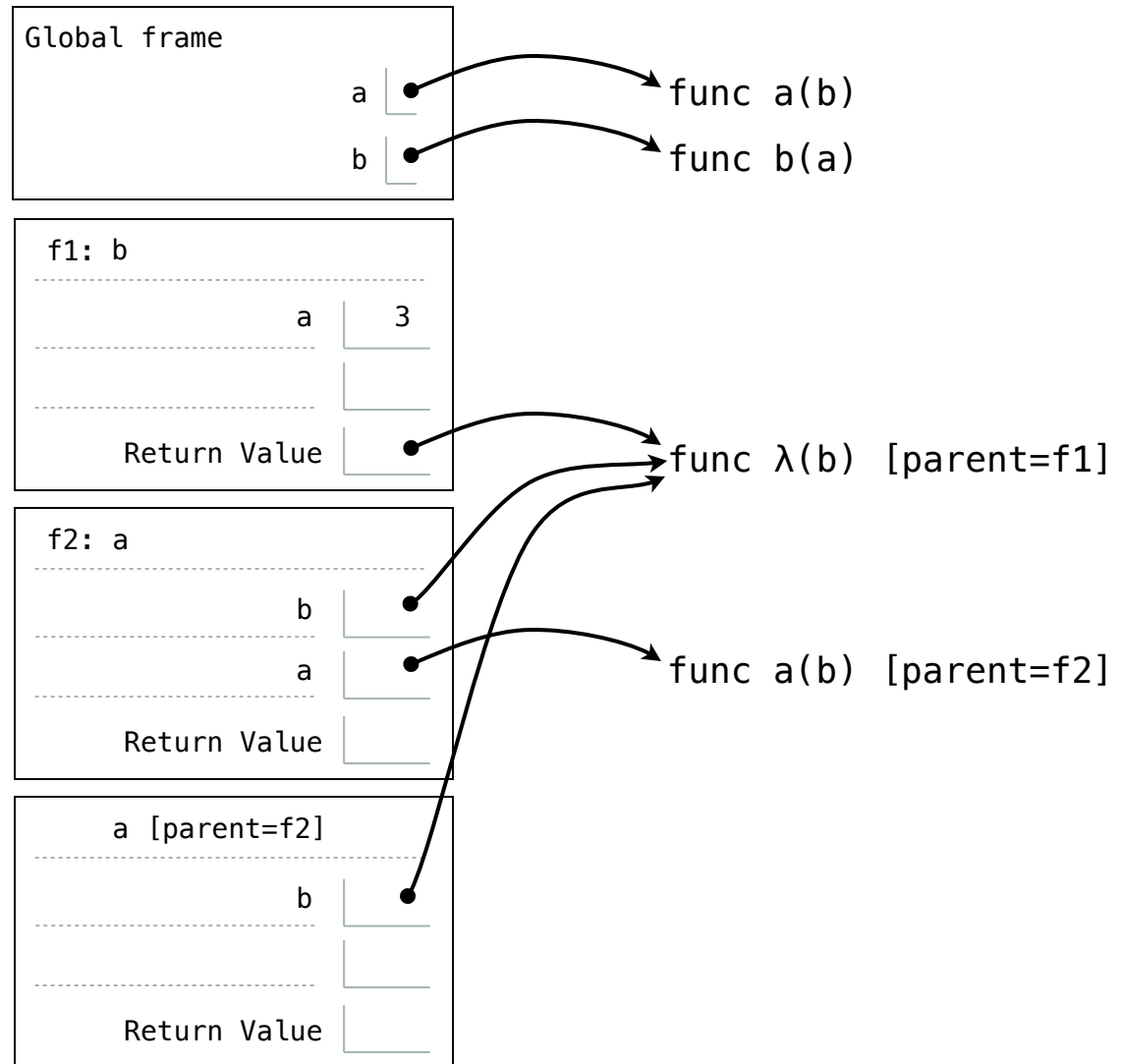
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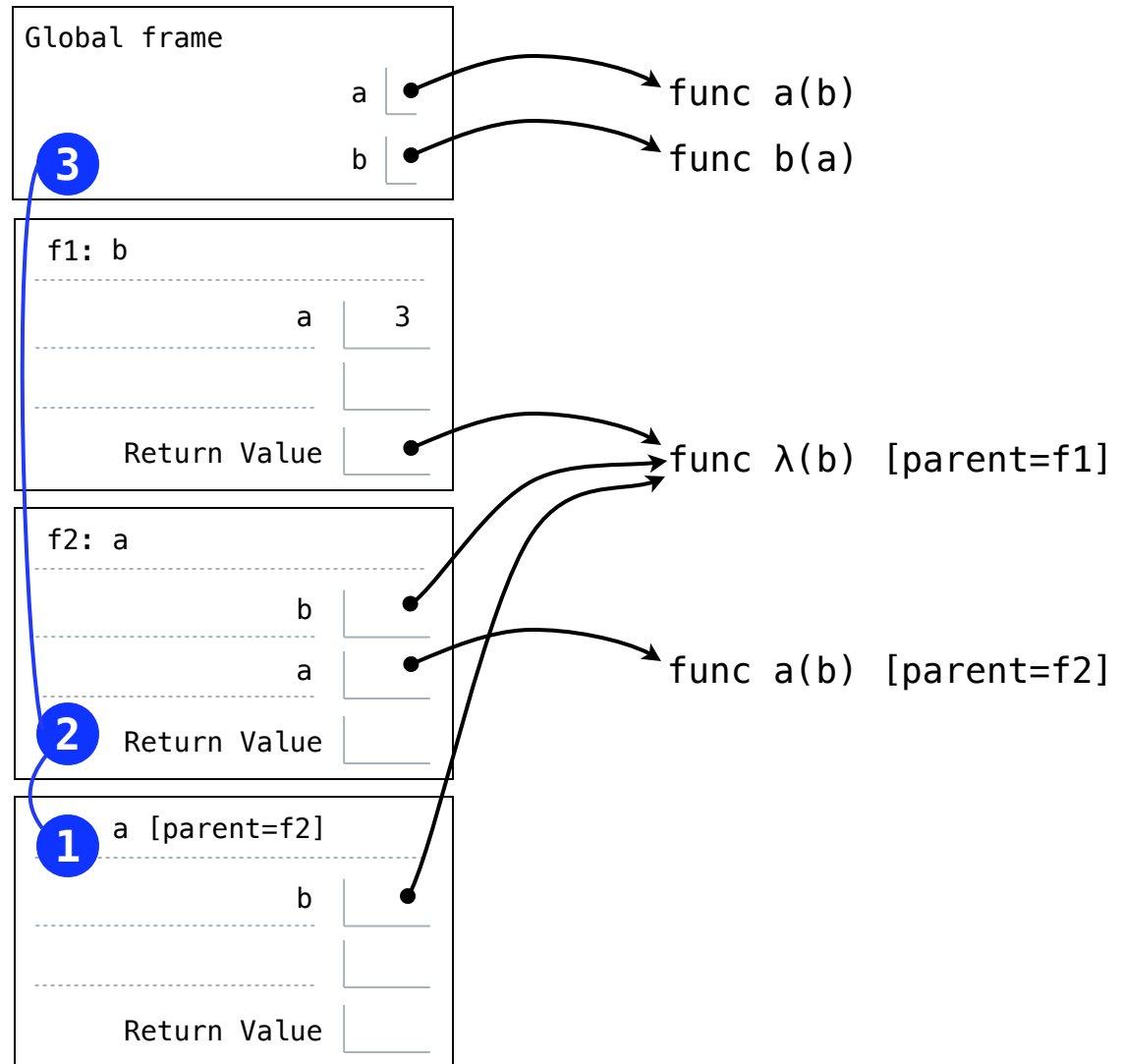
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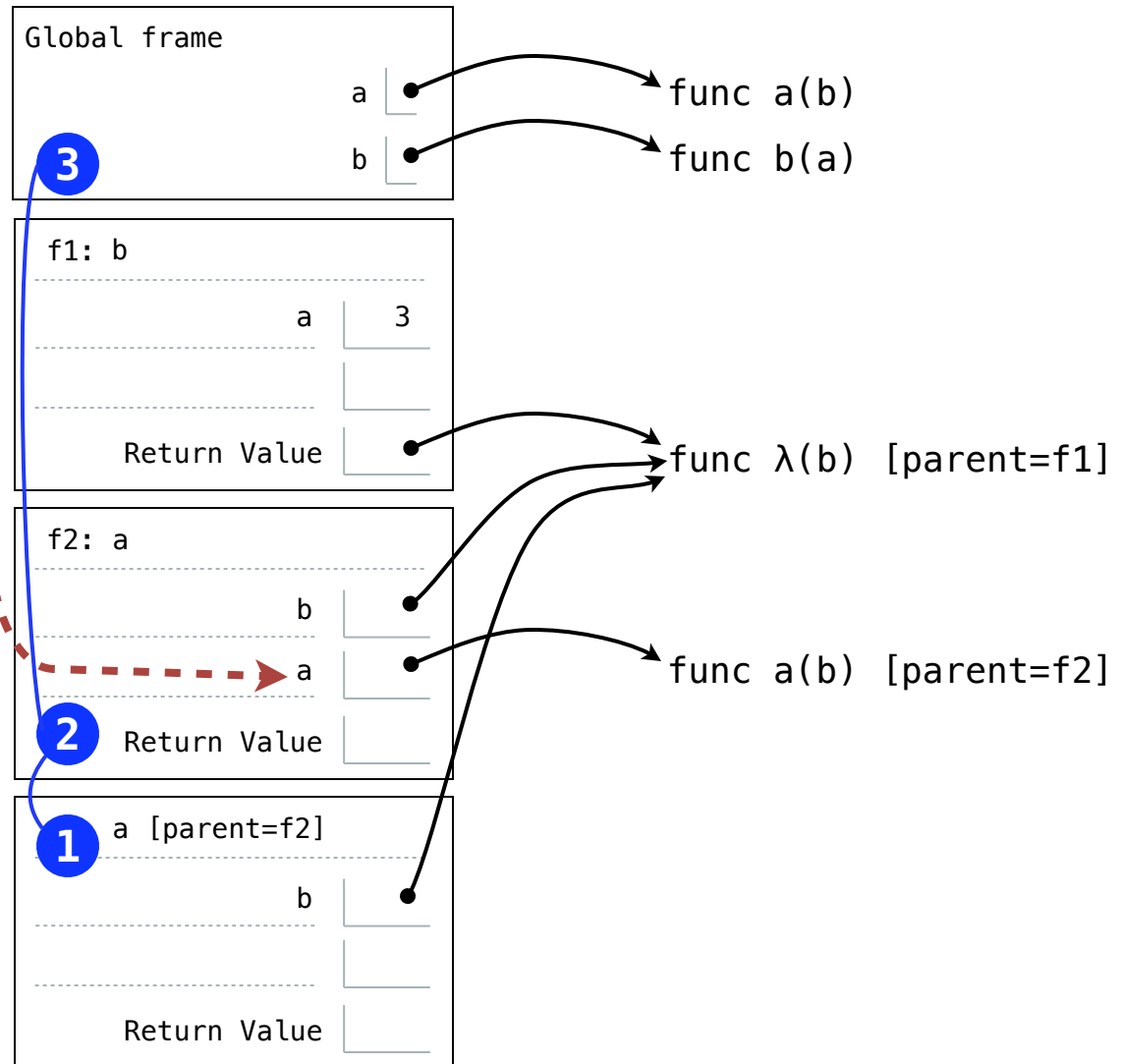
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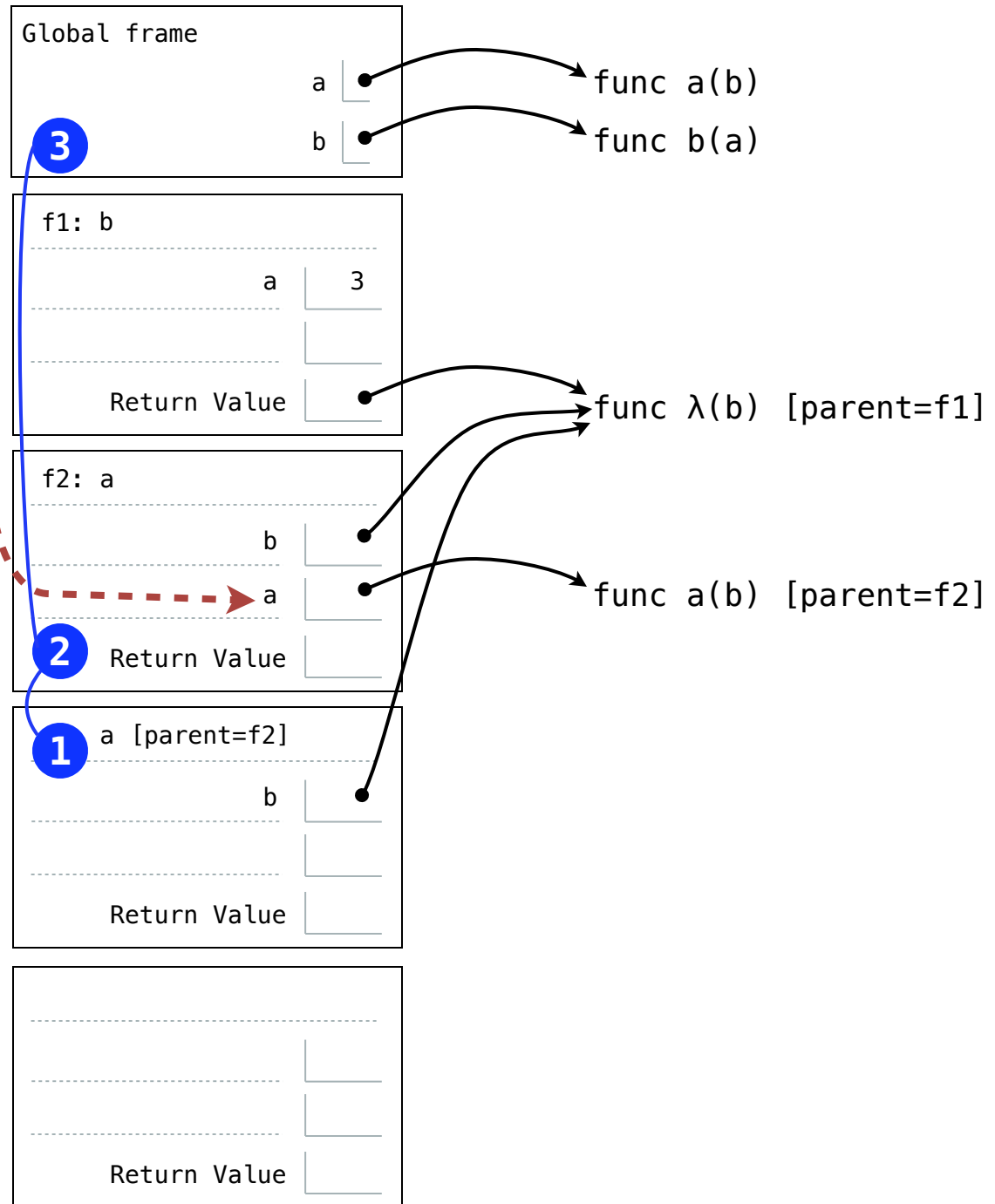
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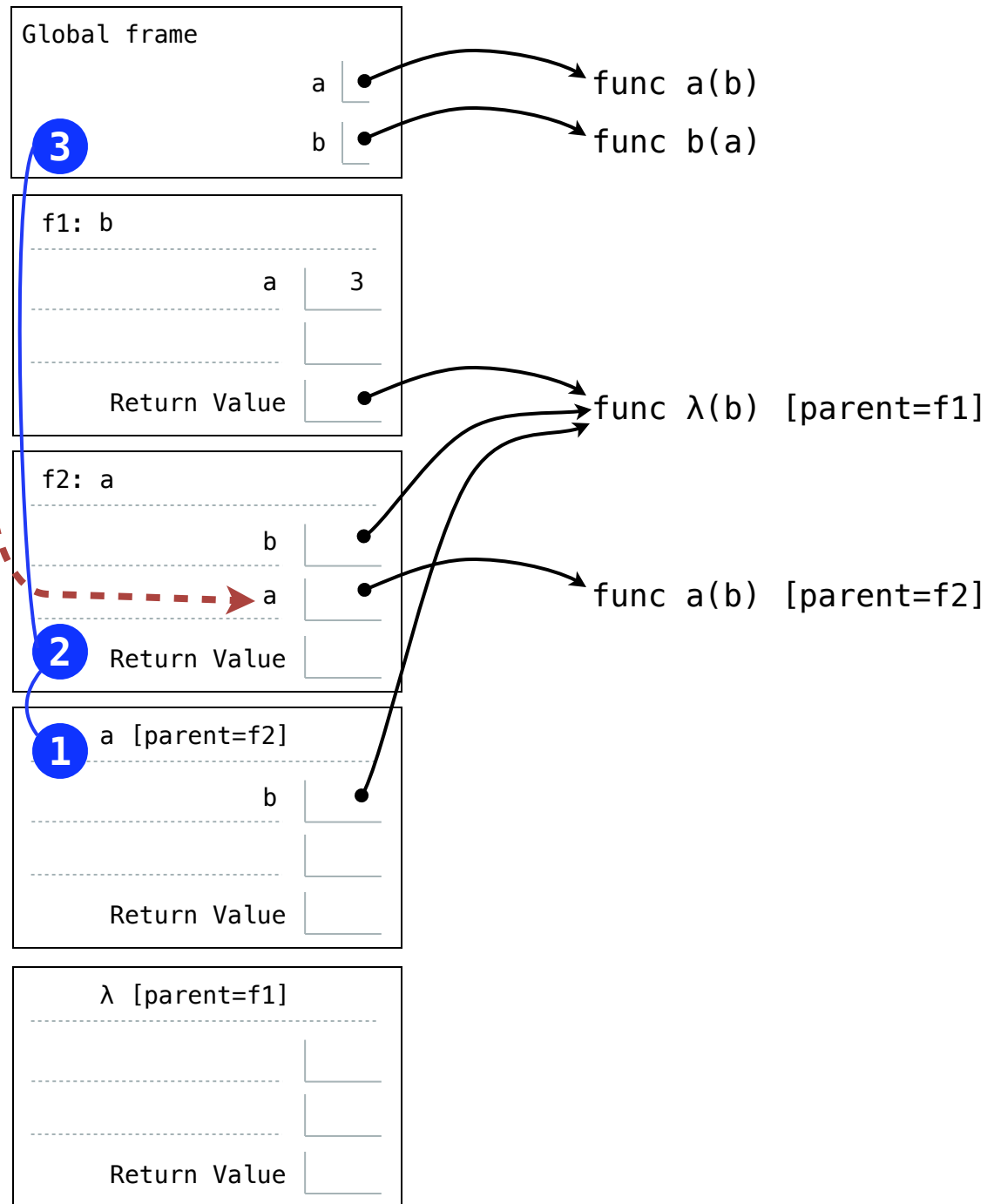
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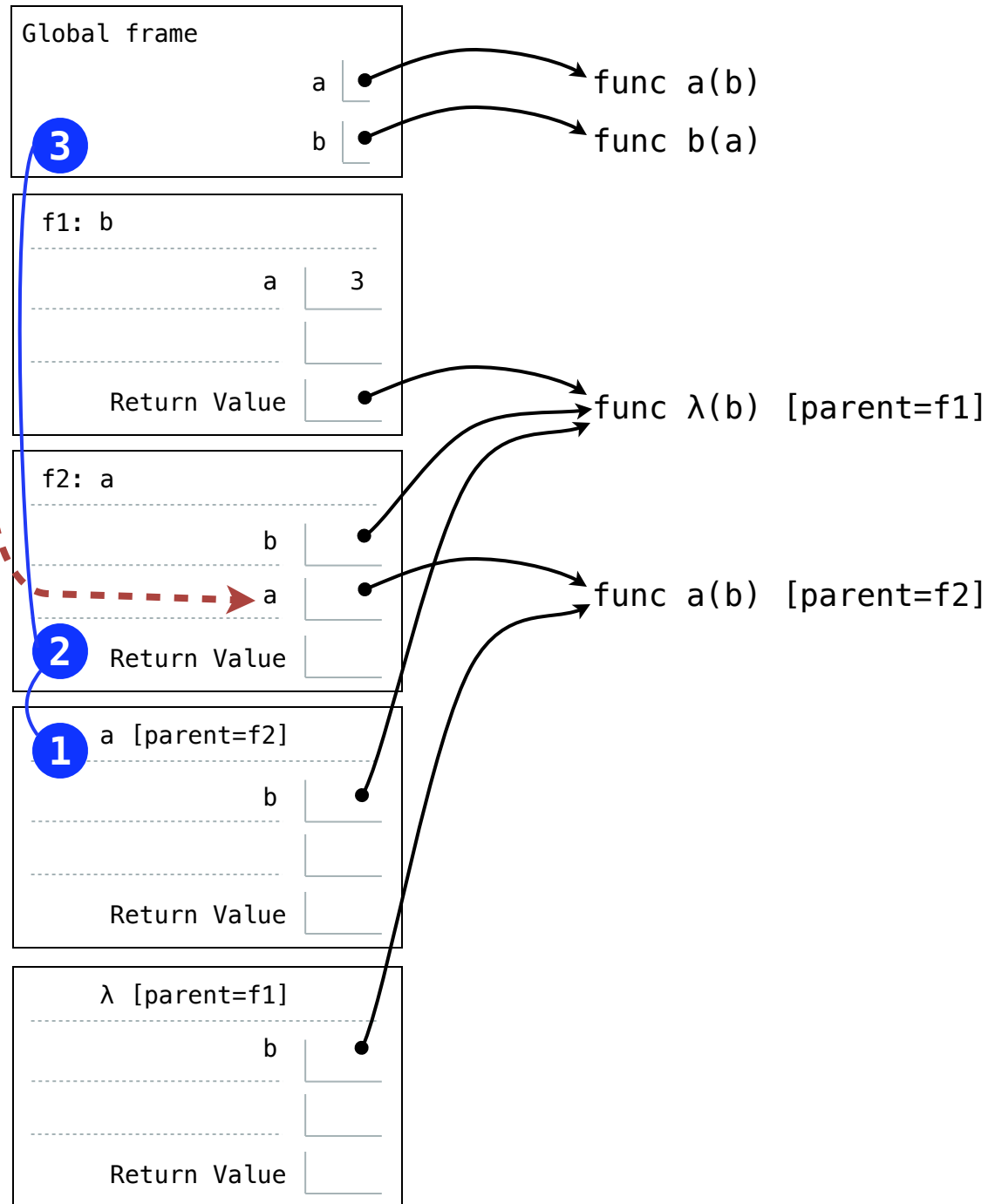
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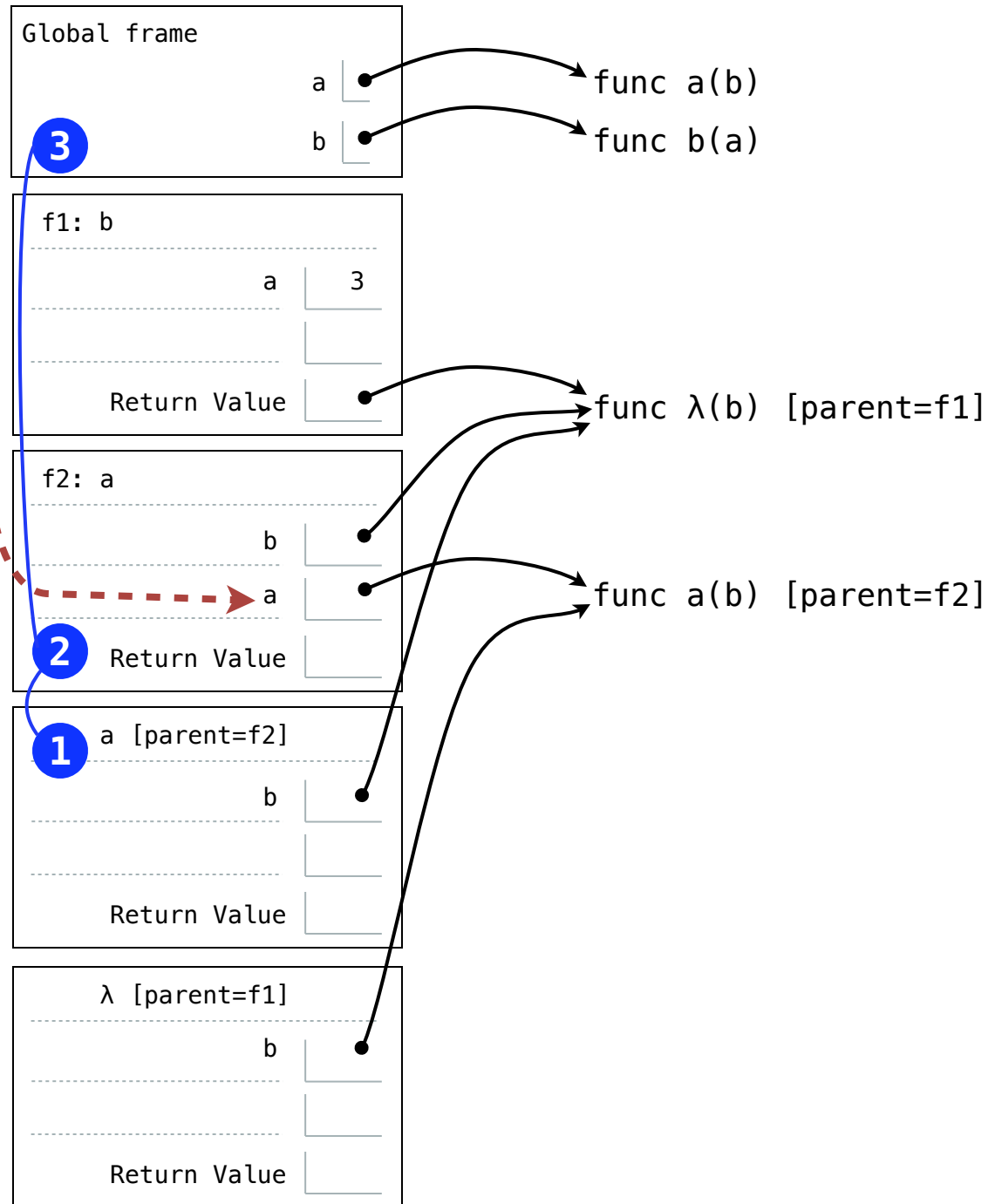
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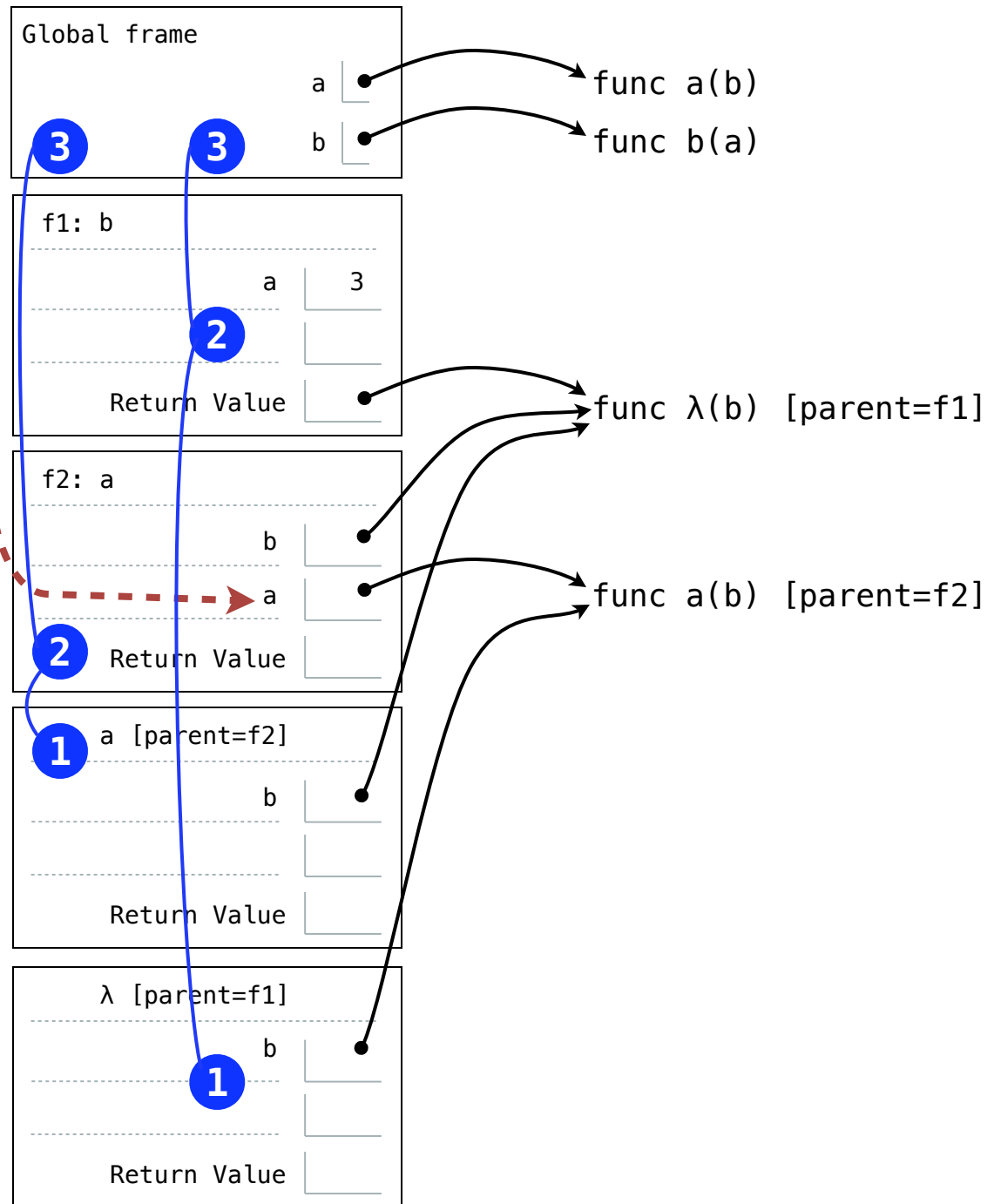
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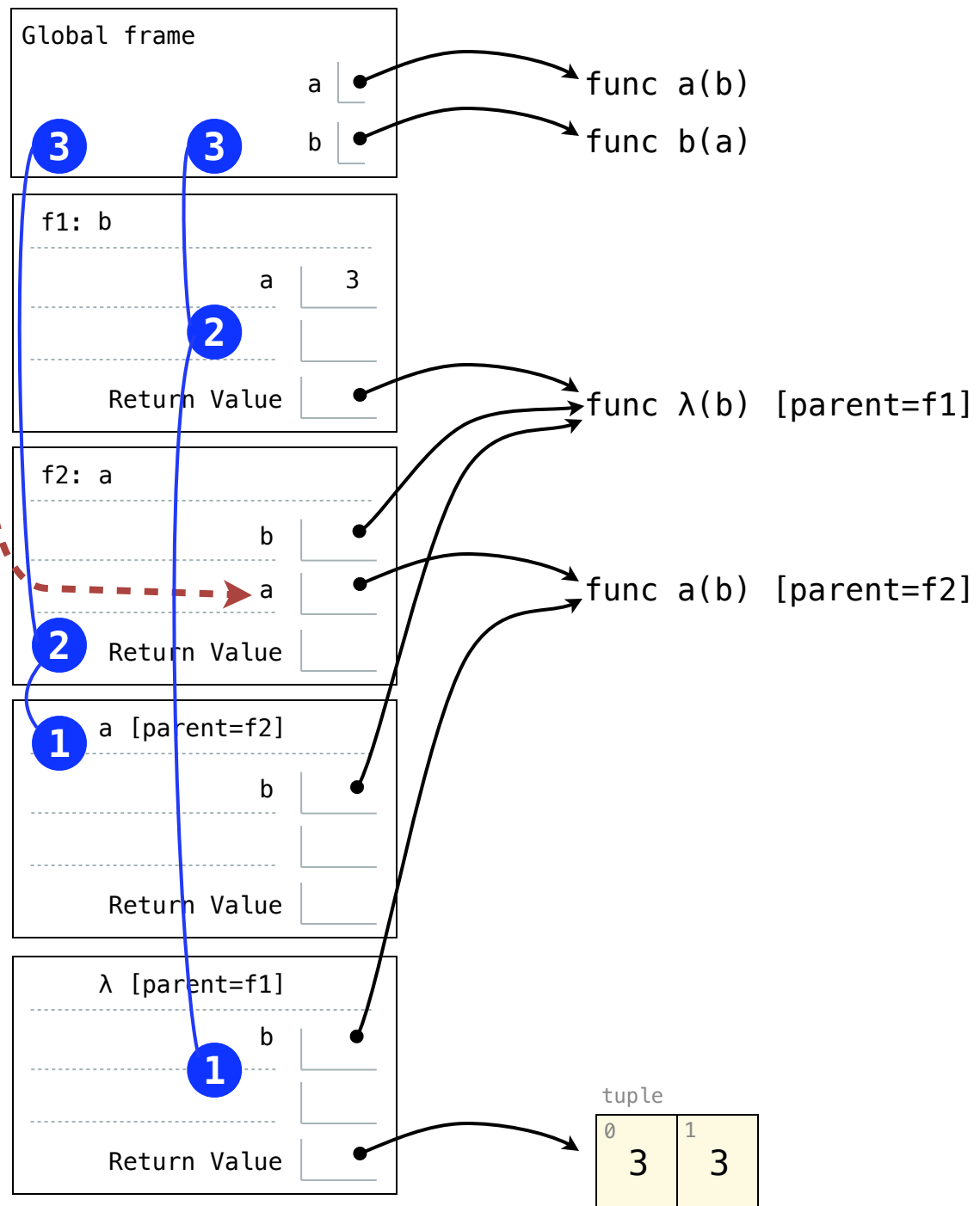
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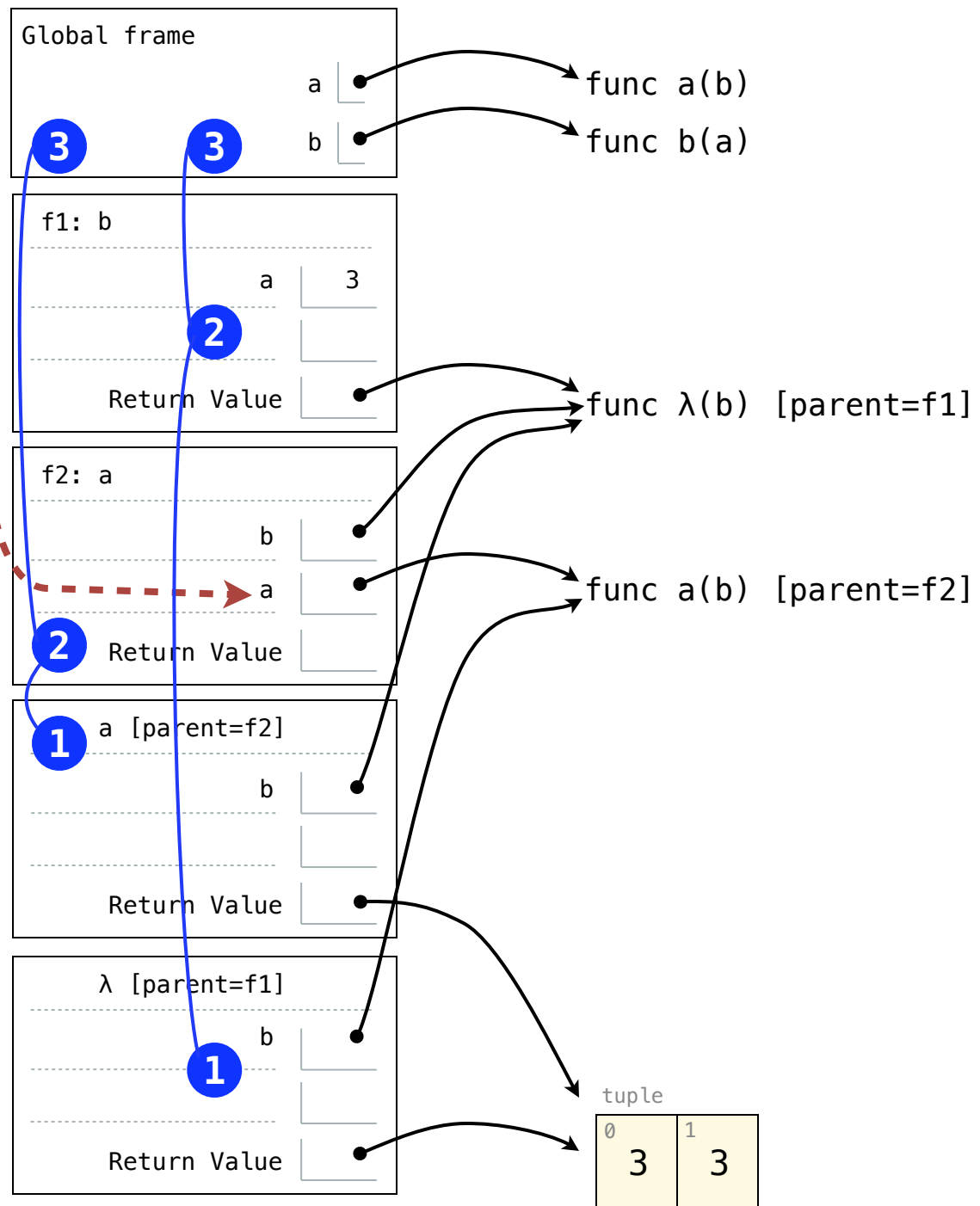
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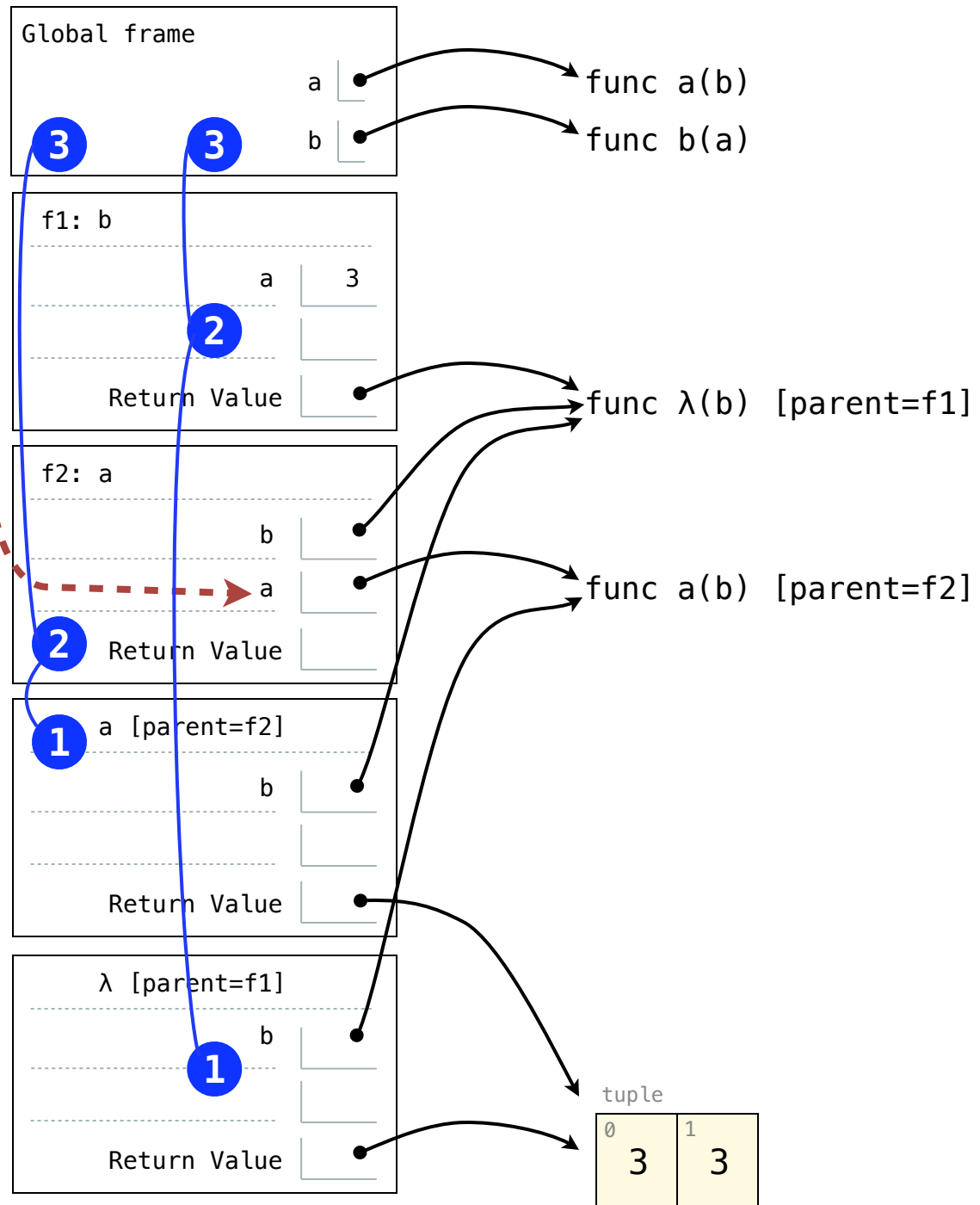
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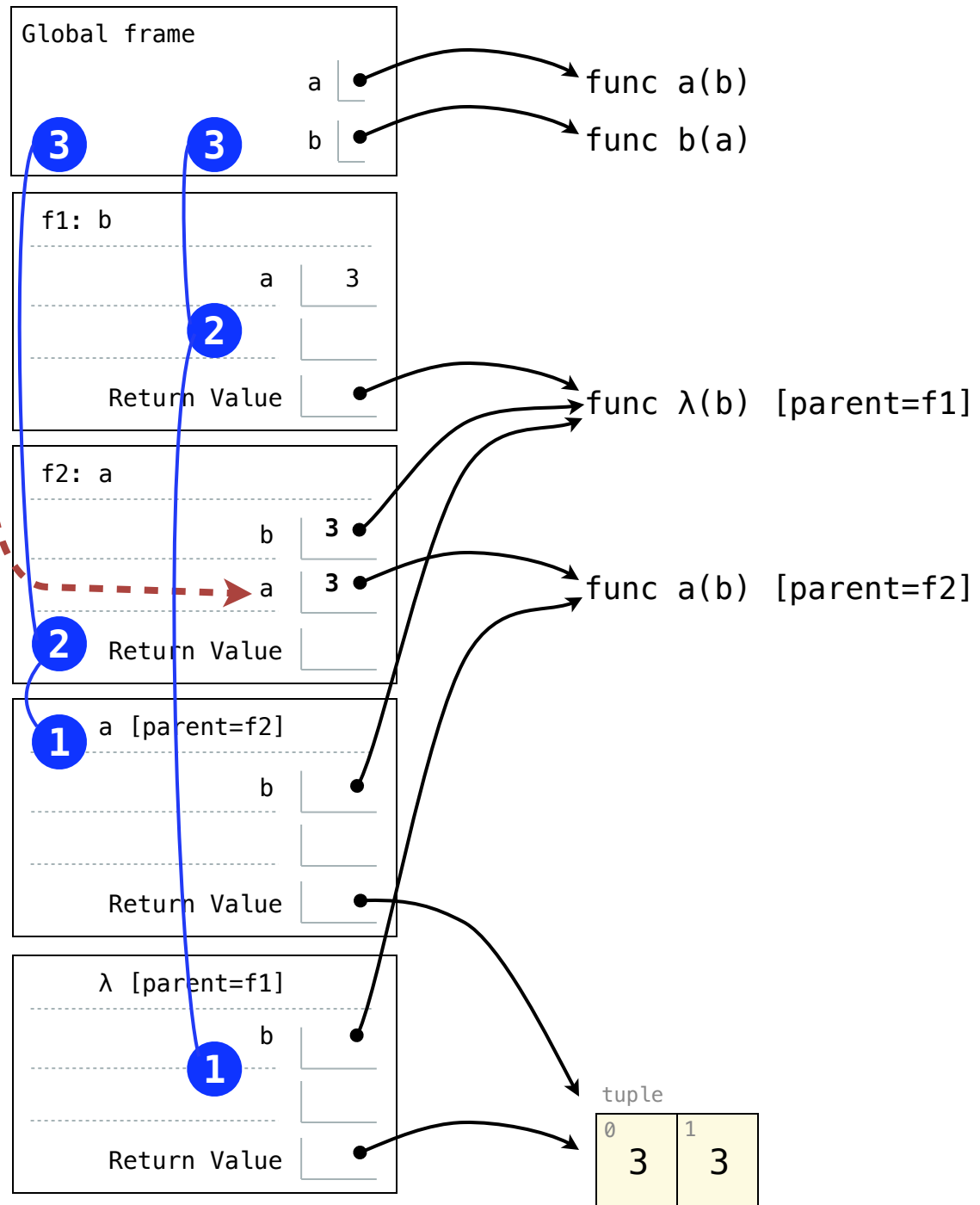
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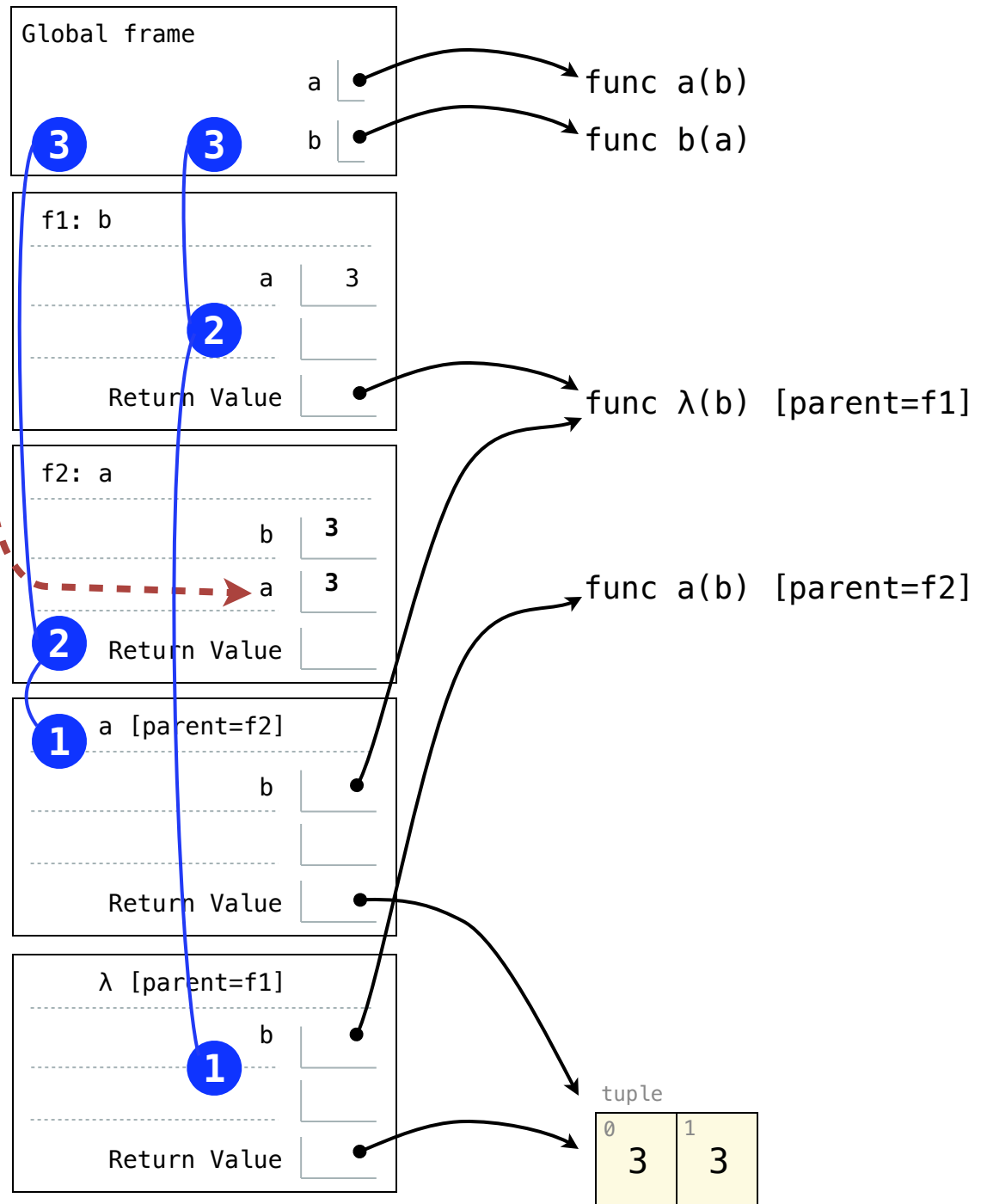
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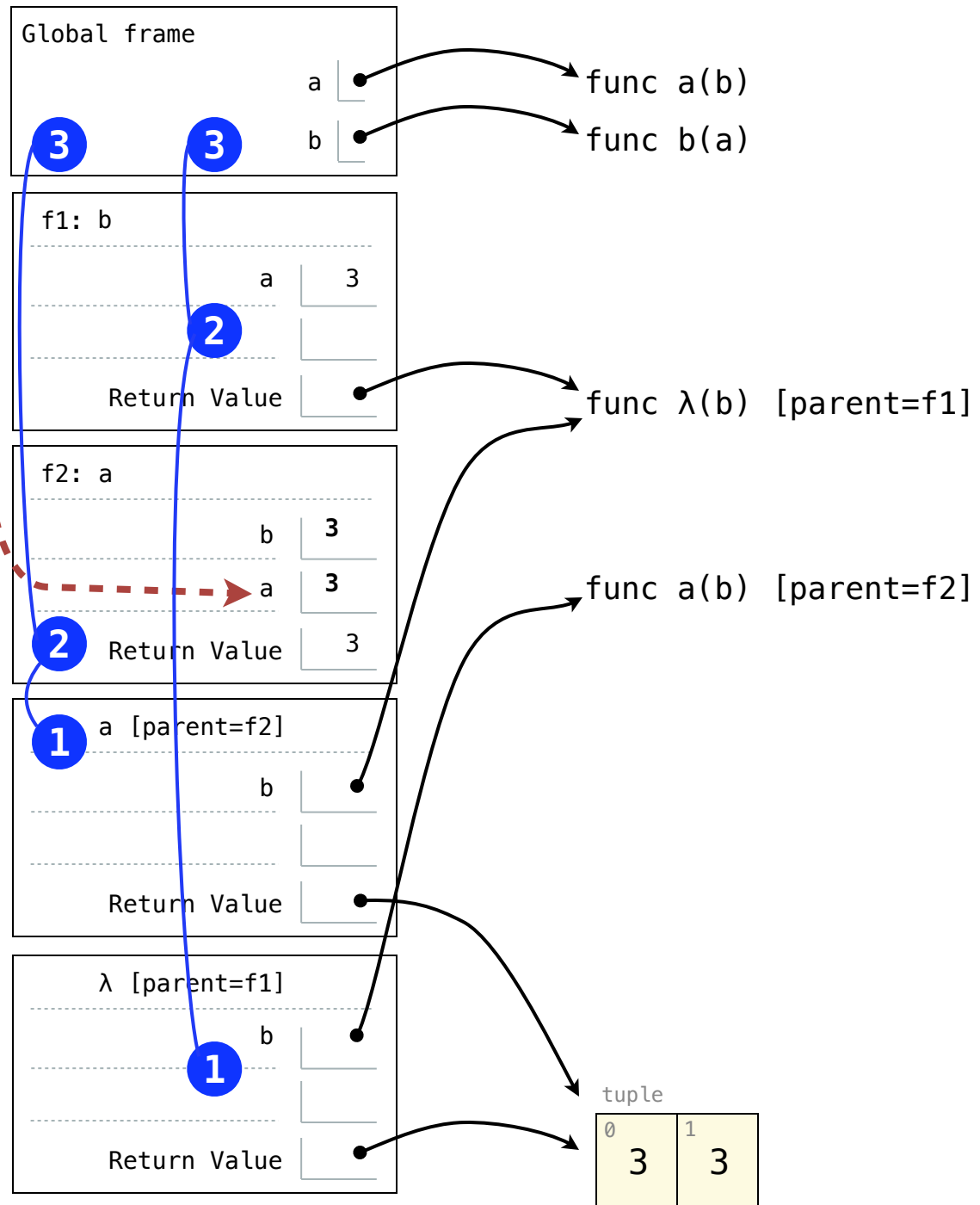
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and constant x ,
 $f(y) - x$