



Exercise 7

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Exercise 7

2/2 points (graded)

ESTIMATED TIME TO COMPLETE: 3 minutes

Consider the following function definition:

```
def f(n):  
    """  
    n: integer, n >= 0.  
    """  
    if n == 0:  
        return n  
    else:  
        return n * f(n-1)
```

When we call `f(3)` we expect the result 6, but we get 0.

When we call `f(1)` we expect the result 1, but we get 0.

When we call `f(0)` we expect the result 1, but we get 0.

Using this information, choose what line of code should be changed from the following choices:

☐ `if n == 0:`

☒ `return n`

☐ `else:`

☐ `return n * f(n-1)`



How should this line be rewritten?

`return 1`

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Exercise 7

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<div><div>?</div><div><u>SPOILER</u></div><div><u>return n + 1 seems to work for all calls but is marked incorrect</u></div></div>	1
<div><div></div><div><u>For anyone confused about this question</u></div><div><u>Imagine the question starts off with "I want to write a function which multiplies n down to 0, for example f(4) = 4 * 3 * 2 * 1"</u></div></div>	2
<div><div></div><div><u>For Anyone Confused about "When we call f(0) we expect the result 1, but we get 0."</u></div><div><u>The function seems to clearly return 0 for f(0), so it is puzzling why the user would expect f(0) == 1 We don't have any description of...</u></div></div>	2



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