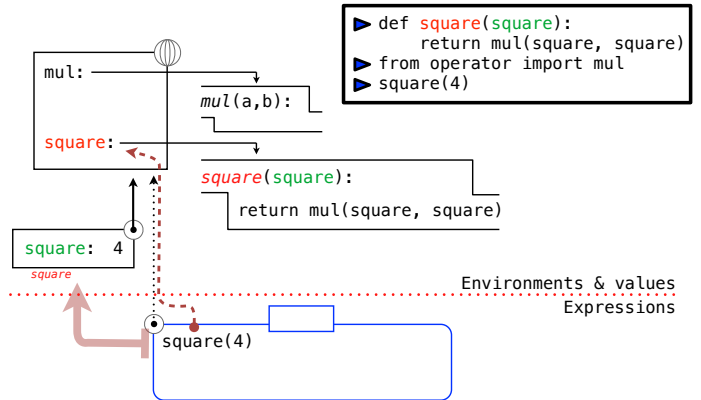


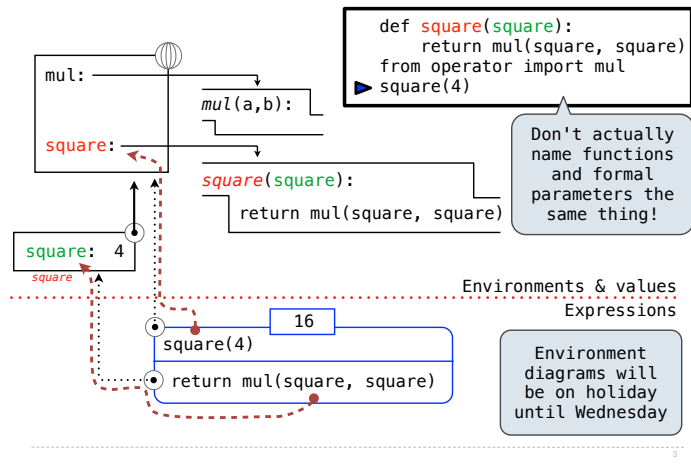
## 61A Lecture 4

Friday, September 2

### What Happened with def square(square)?



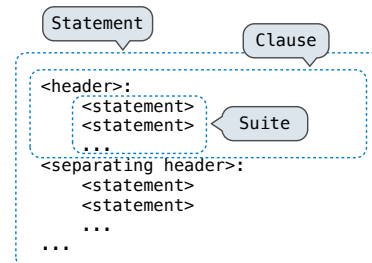
### What Happened with def square(square)?



### Statements

A statement is executed by the interpreter to perform an action

#### Compound statements:



### Compound Statements

#### Compound statements:

```

<header>:
  <statement>
  <statement>
  ...
  Suite
<separating header>:
  <statement>
  <statement>
  ...
  
```

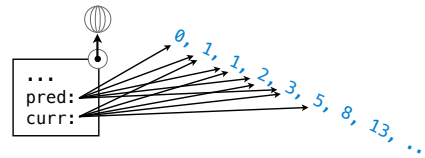
A suite is a sequence of statements

To "execute" a suite means to execute its sequence of statements, in order

#### Execution Rule for a sequence of statements:

- Execute the first
- Unless directed otherwise, execute the rest

### The Fibonacci Sequence



```

def fib(n):
    """Compute the nth Fibonacci number, for n >= 2."""
    pred, curr = 0, 1 # First two Fibonacci numbers
    k = 2 # Tracks which Fib number is curr
    while k < n:
        pred, curr = curr, pred + curr
        k = k + 1
    return curr
  
```

## Higher-Order Functions Introduction

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(Demo)

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7

## Pig Introduction

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(Demo)

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8