Final words on variable scope
A variable cannot be both local and global in the same function

def foo():
    if y == "hello":
        print "Hello to you as well!"
    y = "hi"
    print y
y = "hello"
foo()

- We need yet another version of our mental model!

- Here y is a global variable

- And here y is a local variable
Here is an “even more correct” version of item (4)

When Python starts executing a function, the statements of the function are first examined to get the names of variables that might be assigned a value in the function. If a variable \( x \) might be assigned in the function, but is not explicitly \texttt{global}, then it is local. If a variable is not local by this criterion, then by default it is global.