

## 61A Lecture 2

## Announcements

## Names, Assignment, and User-Defined Functions

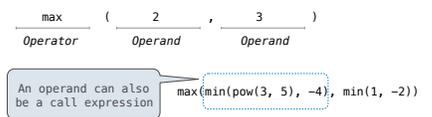
(Demo)

## Types of Expressions

Primitive expressions:



Call expressions:

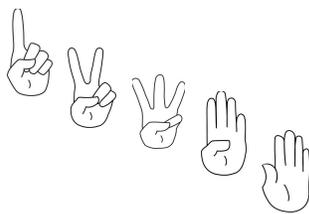


## Discussion Question 1

What is the value of the final expression in this sequence?

```
>>> f = min
>>> f = max
>>> g, h = min, max
>>> max = g
>>> max(f(2, g(h(1, 5), 3)), 4)
```

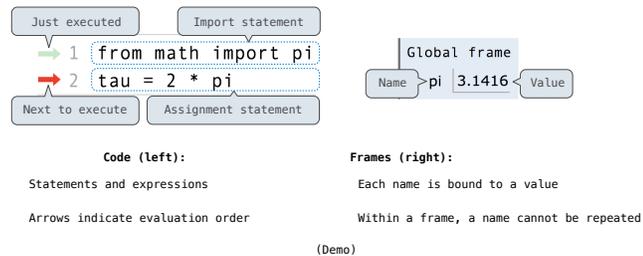
???



## Environment Diagrams

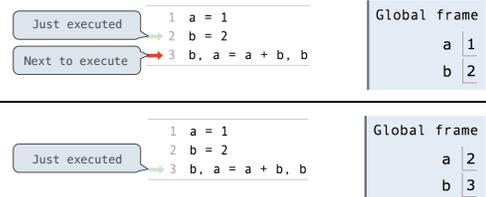
## Environment Diagrams

Environment diagrams visualize the interpreter's process.



Interactive Diagram

## Assignment Statements



**Execution rule for assignment statements:**

1. Evaluate all expressions to the right of = from left to right.
2. Bind all names to the left of = to those resulting values in the current frame.

Interactive Diagram

