INFO5002: Intro to Python for Info Sys

Functions

PCC 129-155

Northeastern University

Slides created by: Zachary Doucet

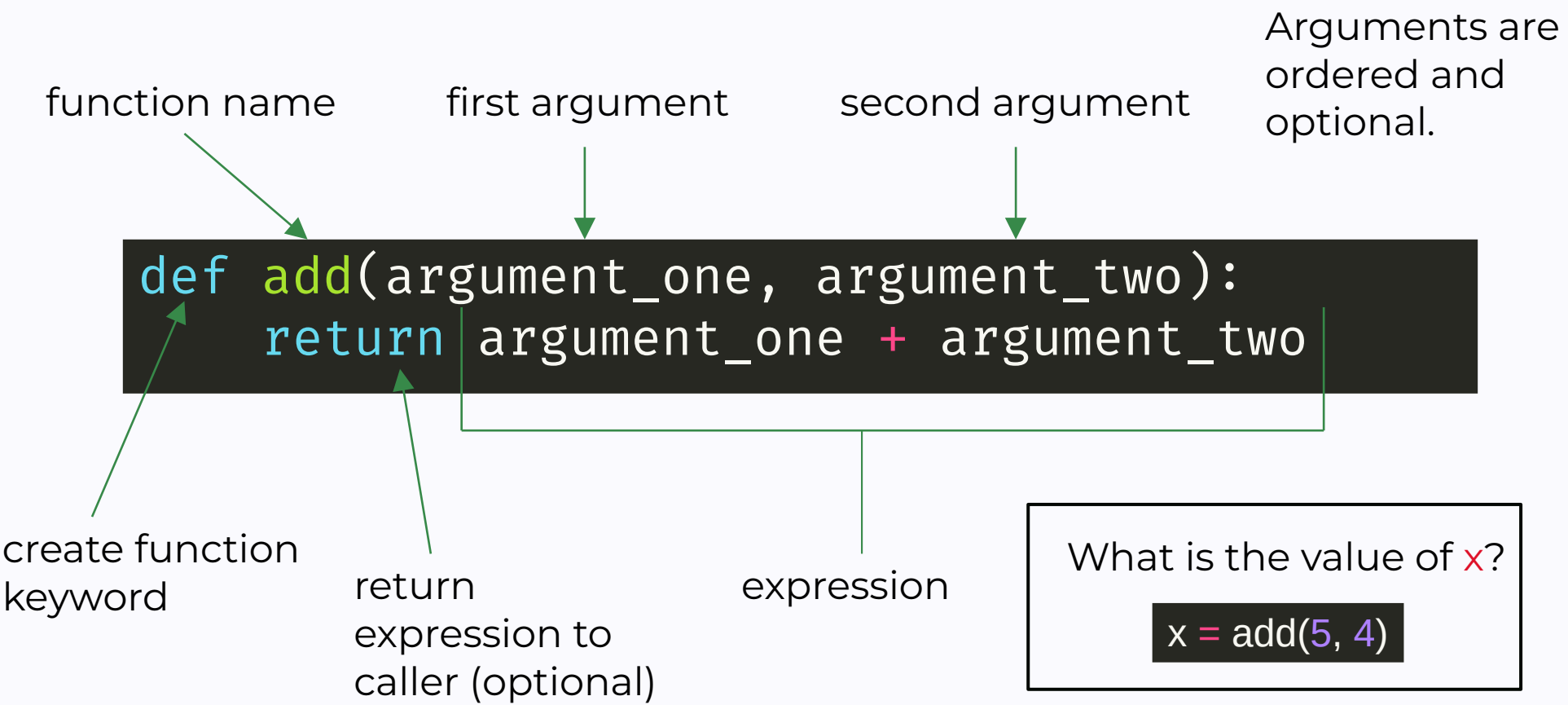
Functions as factories

Source: Wikimedia

A way to group operators together that can be executed on **different data**.

Source: Wikimedia

Creating Functions



Let’s practice

- Create the following functions:

  I. get_greeting which returns “welcome to my store”.

  II. print_greeting which prints “welcome to my store”.

  III. sub that takes two numbers and returns the subtraction of the second from the first.

  IV. multiply_all that takes five numbers and returns the multiple of them all.

Best Practices

Make code readable

- Keep each line short in length. Never more than 100 chars.
- Group similar lines together and leave a line break between logically different lines.
- Use comments to help explain confusing code.

```
# This is a comment
x = 2
```

```
"""This is a multi-line comment
    that I can run as long
    as I want """
x = 1
```

Make code readable (Continued)

- Use descriptive names for variables and functions and not embeddings, mapping, or encodings.

Single Responsibility Principle

- One thing should do one thing; and do that thing very well.

Tries to be
- Fridge
- Media Player
- Entertainment System
- Calendar

- Each function should be responsible of a single logical idea.
- Break big functions into smaller reusable functions.