Functions and Modules

CS 101 - Spring 2016
Professor Briggs
Last week:

- types (int, float, str)
- input (x = int(input('Enter an integer: ')))
- strings

This week:

- libraries
- functions

Homework 2

- error messages, strings, functions
Function calls in Python

follows same naming rules as variables

zero or more items separated by commas, called ‘parameters’ in the function definition

function_name(arguments)

functions can return a value called the return value

The parentheses are always present, even if there are no arguments

Examples

>>> type(5)
<class 'int'>

>>> len('No more')
7

>>> int('42')
42
**Function definition**

**def** is a keyword that says we are “defining” a function

```python
def function_name(parameters):
    """Documentation""
    statement1
    statement2
...
    return return_value
```

*return* is another keyword. It means stop executing this function and replace the original call with this value.

It is **optional**. The function will return when it runs out of statements. It can also be used without the value if we just want to leave the function.

The colon says we are starting a **block**, and all indented lines below belong in the same block.

We typically put documentation about the function here inside three quotes. This is what shows up when we call help().
Homework 2

- Topics: Error messages, strings, functions
- Homework description on go/cs101
- For help go to MBH 505 Tu/Th 1-4pm or Wed/Fri 12:30-1:30 or Sun/Mon/Tue/Wed/Thurs 7-9pm
- Submit via script (see HW description)
- Due Wednesday 3/2 @ 11:59pm