

Writing Functions

CS 101 - Spring 2018

Professor Briggs and Grant

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

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

indentation

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

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

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.

Homework 2

- Topics: Error messages, strings, functions
- Homework description on [go/cs101](https://go.cs101)
- For help go to office hours or MBH 505 to see Ruben or MBH 505 Sun/Mon/Tue/Wed/Thurs 7-9pm
- Submit via script (see HW description)
- Due Wednesday 2/28 @ 11:59pm

