TODO week 1:
- Attend your assigned lab section on Wednesday (look for it online if waitlisted)
- Complete PA0 (mostly form-filling, no programming) by Friday 5pm, link on course web page
- Complete your first programming practice/reading by Friday 5pm, link to Stepik on course web page
- Register your iClicker on Canvas

Python as a calculator (IDLE3)

```
Python 3.7.6 (default, Dec 30 2019, 19:38:26)
[Clang 11.0.0 (clang-1100.0.33.16)] on darwin
>>>
>>> 4
4
>>> 5 + 6
11
>>> # lines after hash marks are called comments
>>> # they don't do anything but are useful for explanations with code!
>>> (4 + 5) * 7
63
>>> x = 9
>>> (x + 3) * 2
24
>>> x - 1
8
>>> x - 1
8
>>> a_longer_variable_name = 7
>>> x + a_longer_variable_name
16
```

If you want to try on your own ASAP:

Install Python 3 (not 2)

Run the program IDLE3

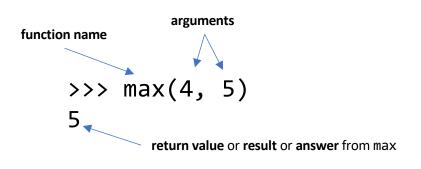(Detailed instructions in lab 1)

At the Python Shell after "Run"

```
Python 3.7.6 (default, Dec 30 2019, 19:38:26)
[Clang 11.0.0 (clang-1100.0.33.16)] on darwin
>>> number_of_students
350
>>> number_of_tas
3
>>> number_of_tutors
19
>>> number_of_staff
Traceback (most recent call last):
  File "<pyshell#18>", line 1, in <module>
    number_of_staff
NameError: name 'number_of_staff' is not defined

===== RESTART: /Users/joe/Documents/test.py ======
>>> number_of_staff
22
```

In a separate Python file (after using File -> New)

```
number_of_students = 350
number_of_tas = 3
number_of_tutors = 19


# then add later, after the error message
number_of_staff = number_of_tutors + number_of_tas
```

```
Python 3.7.6 (default, Dec 30 2019, 19:38:26)
[Clang 11.0.0 (clang-1100.0.33.16)] on darwin
>>> max(4, 5)
5
>>> min(3, 7)
3
>>> abs(-2)
2
>>> max(5, 4)
5
```

Function documentation

`max(n, m)`

max takes two numbers n and m, and returns the larger one

`min(n, m)`

min takes two numbers n and m, and returns the smaller one

`abs(n)`

abs takes a number n and returns its absolute value

function name

arguments

```
>>> max(4, 5)
5
```

return value or **result** or **answer** from max

This entire **expression** is a **function call** or a **use of a function**.

The **arguments** can also be expressions.

```
>>> # Give an example of an expression that uses max and + in the same expression
>>>




>>> # Give an example of an expression that uses min, abs, and + in the same expression
>>>
```