

Jamie Saxon

Introduction to Programming for Public Policy

October 2, 2017

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- ▶ We will often do something "if" a condition is satisfied (True), and not do it if the condition is False.
- ▶ It is **critical** to understand how they are combined (and how other variables may be converted into them).

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## What is Python?

# Python is a popular, high-level interpreted programming language.

**Interpreted**: computer 'runs your instructions,' so you can:

- ► Run **interactively**: execute one line of code at a time.
- ► Or **script**: write down and save all of your commands.
- ► (It actually compiles itself, 'just-in-time.')

**High level:** python hides a lot of the complexity from you.

- ▶ You don't have to worry about moving bits (1s and 0s) around.
- ▶ You can accomplish a lot, with relatively little code.
- ► There are tons of libraries: it is simultaneously a basic programming language, an advanced computational engine, an excel buster, a web designer and scraper, a mapping platform, ...

Through the next two lecture, we'll discuss:

### **Types**

#### **Control**

## Assignment, Operators, and Methods

Some of them will be mixed together.

Launch python on your computer, or open a jupyter notebook:

Command line: 'python' (must be python 3).

**Local Jupyter: Anaconda Navigator** 

Online Jupyter: <u>tmpnb.org</u> or <u>try.jupter.org</u>

Click 'New' in the upper right corner, then Python 3.

