Topic Outline: Python Fundamentals 2

Revised: September 25, 2017

Materials

- Today's handouts: this outline, stickers

- All posted on *Topic outlines & book & links* page of website (except the stickers).

Preliminaries

- Tools and buzzwords

    - Boolean variables, comparisons, conditionals (`if`, `else`), slicing, loops (`for`), function definitions.

- Rules to live by: don't panic, ask for help

- What is this?

    - `'abcd'`
    - `['Chase', 'Dave', 'Sarah', 'Spencer']`
    - `('Chase', 'Dave', 'Sarah', 'Spencer')`
    - `'98.76'`
    - `float('98.76')`
    - `int(float('98.76'))`
    - `len('98.76')`
    - `list('abcd')`
    - Tab completion
    - `object.method?`
    - Object inspector

- **Exercise**

    - Put red sticker on your laptop
    - Start Spyder
    - Open new file `bootcamp_class_pyfun2.py` in your `Data_Bootcamp` directory
    - Replace red sticker with green when you're set

Python fundamentals 2

We'll follow the book chapter.

- Dictionaries

- Logical expressions (comparisons)

- Conditionals

- Slicing strings and lists

- Loops over lists and strings (`for`, `else`)

- Loops over counters (`range()`)

- Defining functions

- Style

- Review

    - Put red sticker on, replace with green when done

Examples

If time permits, we'll go through some examples of economic and financial data and its properties. It's an IPython notebook that you can view on the GitHub repo: the `Code/IPython` directory, file `bootcamp_examples.ipynb`.

After this module

- Required

    - Code Practice #2 (should take about an hour)

- Recommended

    - **Write**: After class, write down everything you remember without using your notes
    - **Review:** Reread the chapter and fill in anything you missed.
    - Ask for help if you get stuck.