

Topic Outline: Python Fundamentals 1

Revised: January 27, 2016

Materials

- Today's handouts: this outline, code, book chapter, code practice, red/green stickers
- All posted on *Topic list & links* page of website (except the stickers).

Preliminaries

- Reminders
 - Why are we here?
 - Spyder
 - `Data_Bootcamp` directory/folder
- Tools and buzzwords
 - Google fu, Spyder, syntax, calculations, assignments, strings, lists, built-in functions, methods, tab completion, object inspector
- **Exercise**
 - Put red sticker on your laptop
 - Start Launcher, then Spyder
 - Point out the editor and IPython console
 - Download today's code file (raw, save in `Data_Bootcamp` directory)
 - Open code in Spyder (File, Open, ...)
 - Replace red sticker with green when you're set
- Python programs
 - Syntax: the rules of Python are less flexible than (say) English
 - Not like Excel: they run line by line, like a book
 - Ours will include: data input, data management, graphics
 - Examples: Maddison data, OECD healthcare indicators

Python fundamentals 1

We'll follow the book chapter.

- Calculations
- Assignments
- The `print()` function
- Strings
- Quotes
- Comments
- Spyder
- Code cells
- Lists
- Built-in functions: `type()`, `len()`, conversions
- Objects and methods, tab completion
- Python 2 and 3
- Review
 - Put red sticker on, replace with green when done

After class

- Required
 - Code Practice #1 (should take no more than an hour)
- Recommended
 - **Write:** Right after class, write down everything you remember without using your notes
 - **Review:** Reread the chapter and fill in anything you missed.