

## Topic Outline: Pandas 1: Data Input

Revised: February 25, 2016

### Materials

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

### Preliminaries

- Tools and buzzwords
  - Packages, import, dataframe, csv files, series, columns, index, API.
- What are these?
  - Objects and methods
  - Function returns
  - {'Chase': 'Coleman', 'Spencer': 'Lyon'}
- Start Spyder and open new file `bootcamp_class_pandas1.py` in your `Data_Bootcamp` directory

### Pandas 1: Data input

We'll follow the book chapter.

- Packages
- Importing packages
- Reading internet files
- Properties of dataframes
- Working with variables
- Dataframe methods
- Reading files from your computer
- Examples: Penn World Table, World Economic Outlook, PISA education data, UN population data and projections, income by college major
- APIs: FRED, World Bank, Fama-French equity returns
- 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 class

- Required
  - Code Practice #3
- Recommended (always)
  - **Write:** After class, write down everything you remember without using your notes
  - **Review:** Reread the chapter and fill in anything you missed.