(Intro to) Data Analysis in Python

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January 30th, 2019 Class 03

Reminder:

- All in-class code and lecture slides can be found on GitHub
 - https://github.com/JohnSerences/PSYC193 IntroPython W2019

Course Schedule (approximate)

- Week00, January 9: What is Python?, Jupyter Environment (Google Colab), First Program, Intro to object types and methods
- Week01, January 16: More on object types, lists, for loops, list comprehensions, slicing lists
- Week02, January 23: If...elif...else statements, dictionaries
- Week03, January 30: User input, while statements, try/except statements
- Week04, February 6: NO CLASS
- Week05, February 13: Midterm, writing functions
- Week06, February 20: Classes, object-oriented programming
- Week07, February 27: File Input/Output, data formats for files (e.g. JSON, HDF5)
- ----end of following book-----
- Week08, March 6: NumPy (numerical computing), Plotting (Matplotlib/Seaborn)
- Week09, March 13: Pandas (data frames)
- Final: Room/Time TBD

In-class work

- To launch a new notebook and do basic setup
 - Log in to: https://colab.research.google.com/notebooks/welcome.ipynb
 - Can just google: "google colab"
 - Use your AD credentials to login
 - File menu -> "New Python 3 Notebook"
 - File menu -> "Rename" (or just type in the name field in upper left corner)
 - File name should be: Lastname_PSYC193_Class00.ipynb
 - Use exactly this convention EVERY time, only updating the 00 counter (so next class is 01, etc).
 - File menu -> "Locate in drive"
 - This will launch a new window with a file list
 - Right click, Move, navigate to our shared folder and move file
 - Now all your work will be saved in our shared folder...

In class quiz on material from last week

- Review questions from last week...
- Any more questions?

In class exercises

 Please finalize by Friday at midnight so that I can grade in time to give feedback.

• We'll reconvene today at 11:30 (or so) to go over answers.

Some shortcut keys (to start with)

- On a PC cntrl = control key, on Mac cntrl = "apple" key
 - New cell above: cntrl+M A
 - New cell below: : cntrl+M B
 - Convert to code cell: cntrl+M Y
 - Convert to text cell: cntrl+M M
- Run a cell (execute code or display markdown): cntrl+ENTER