A Hands on Python Crash Course Supplement

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Event Host

Blacks in Tech - Los Angeles:

Meetup url: https://www.meetup.com/Blacks-In-Technology-Los-Angeles

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PyLadies of Los Angeles: https://www.meetup.com/Pyladies-LA

SoCal Python: https://www.meetup.com/socalpython

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Quick Overview
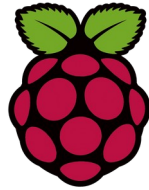
- This is simply a supplement to the code that's available on GitHub: https://github.com/purcellconsult/python-learning/blob/master/python_crash_course.py
- Best way to learn how to code is to code! Download crash course from GitHub and use the comments in the code as your reference point.
- Import the code to an IDE like PyCharm, and then get comfortable breaking things and fixing it.

Why Bother with Python in 2019?

- According to the [SO](SO) 2018 survey, it's within the top-10 most popular programming languages in the world.
  - There's 400+ programming, scripting, and markup languages available!
- Strong and vibrant python communities globally ensures longevity: https://www.meetup.com/topics/python/
- High range of applicability. Google TensorFlow (machine learning), Facebook open sourced Tornado (python web server), Instagram (Django).

What Can Python Be Used For?

How to Install Python?

- For installation details on Windows, MacOS, and Linux distros, view this tutorial: http://purcellconsult.com/python-installation-tutorial
- Could use an online python interpreter for short term purposes:
  - Online GDB: https://www.onlinegdb.com/online_python_interpreter
  - Repl.it: https://repl.it/languages/python3
  - Another online python interpreter http://mathcs.holycross.edu/~kwalsh/python

Programming Challenges and Interview Prep

- Codebat: https://codingbat.com/python
- Codewars: https://www.codewars.com/?language=python
- Hackerrank: https://www.hackerrank.com/domains/python
- Leetcode:https://leetcode.com
- Coderbyte: https://coderbyte.com
- Topcoder: https://www.topcoder.com/challenges
- Codechef:https://www.codechef.com
- Project Euler: https://projecteuler.net/recent

Python Learning Resources

- Python docs tutorial: https://docs.python.org/3
- Python.org wiki: https://wiki.python.org/moin
- Learnpython.org (interactive tutorial): https://www.learnpython.org
- Stack Overflow python: https://stackoverflow.com/questions/tagged/python
- Python programming tutorials:
  https://www.youtube.com/results?search_query=python+tutorials
- Become a Python Developer (My Book):
  https://www.amazon.com/Become-Python-Developer-Wrestle-Defeat/dp/0997326298

Python News

- PyBites: https://pybit.es/pages/news.html
- Planet Python: https://planetpython.org
- r/python: https://www.reddit.com/r/Python
- InfoWorld: https://www.infoworld.com/category/python
- Python Software Foundation: http://pyfound.blogspot.com
- Python Bytes: https://pythonbytes.fm
- Python Insider: https://pythoninsider.blogspot.com
- Python-Dev Archives: https://mail.python.org/pipermail/python-dev
- Pycoders: https://pycoders.com

Popular Open Source Python Projects

- Cpython: https://github.com/python
- SaltStack: https://github.com/saltstack/salt
- Django: https://github.com/django/django
- Flask: https://github.com/pallets/flask
- Keras: https://github.com/keras-team/keras
- Pyright: https://github.com/Microsoft/pyright
- PyTorch:https://github.com/pytorch/pytorch
- TensorFlow: https://github.com/tensorflow/tensorflow
- PEPs: https://github.com/python/peps
- SocialScan: https://github.com/iojw/socialscan
- Data Analysis Baseline Library (DABL): https://github.com/amueller/dabl
- Faceswap: https://github.com/deepfakes/faceswap
- Awesome Python: https://github.com/vinta/awesome-python

10 Python Scripts Scripts for Beginners

- Mass body index calculator:
  https://github.com/purcellconsult/scripts/blob/master/body_mass_index_calculator.py
- Number guessing game: https://github.com/purcellconsult/scripts/blob/master/number_guessing.py
- Calorie calculator: https://github.com/purcellconsult/scripts/blob/master/calorie_calculator.py
- Temperature converter: https://github.com/purcellconsult/scripts/blob/master/pytemperature.py
- Random quote generator:
  https://github.com/purcellconsult/scripts/blob/master/random_quote_generator.py
- United State's currency calculator:
  https://github.com/purcellconsult/scripts/blob/master/united_states_currency.py
- Vowel Hunter: https://github.com/purcellconsult/scripts/blob/master/vowel_hunter.py
- Text based calculator: https://github.com/purcellconsult/scripts/blob/master/text_calculator.py
- Coin flips: https://github.com/purcellconsult/scripts/blob/master/coin_flips.py
- Rock paper scissors script:
  https://github.com/purcellconsult/scripts/blob/master/rock_paper_scissors_game.py