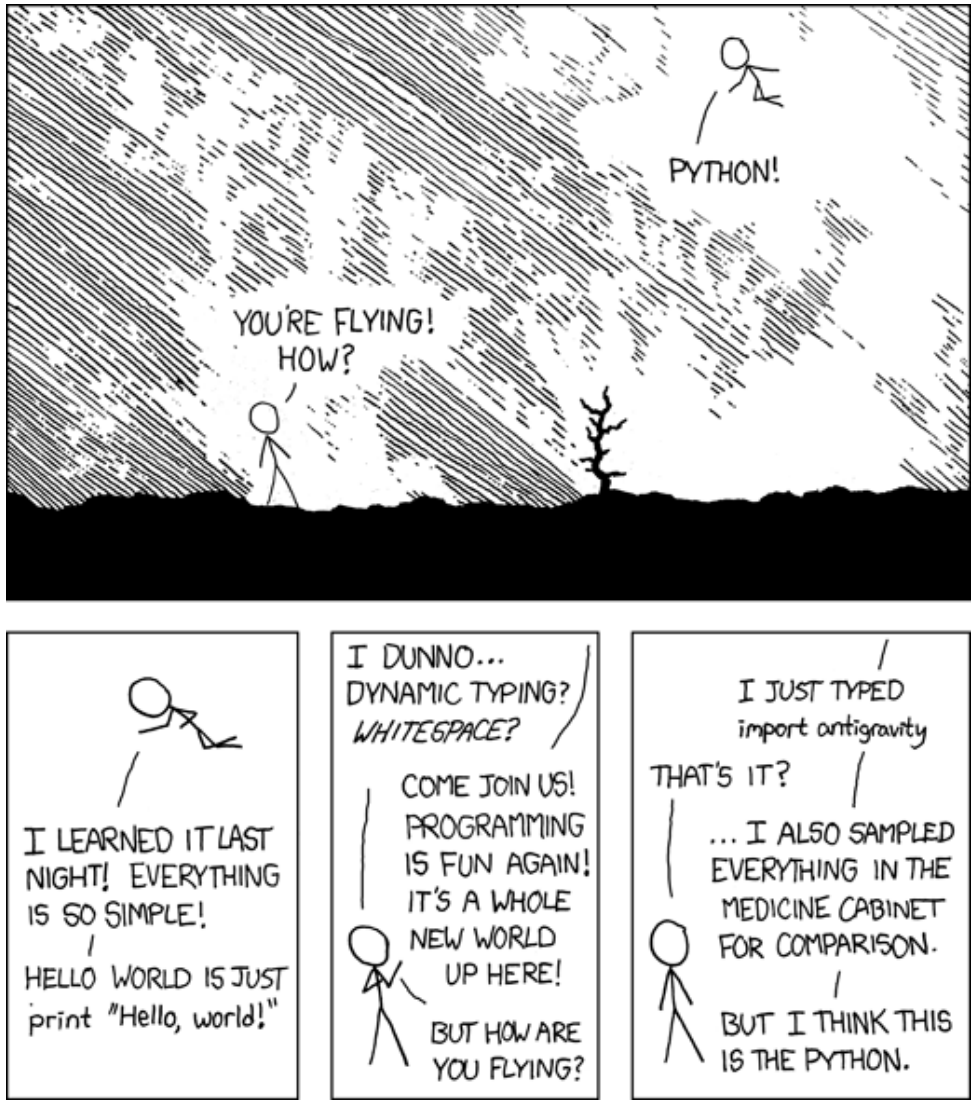
Python programming



https://xkcd.com/353/

Goals

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- Learn about various concepts of programming

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- A note of warning:
  Peter Norvig. *Teach Yourself Programming in Ten Years*
  `http://norvig.com/21-days.html`

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  web development, data science, scientific computing
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- Short-term motivation: the machine learning course and project

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- Finding the ten most common words used by Shakespeare

```
from urllib.request import urlopen
from collections import Counter

URL = 'http://composingprograms.com/shakespeare.txt'
shakespeare = urlopen(URL)
words = shakespeare.read().decode().split()
most_common = Counter(words).most_common(10)
```

Plan

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- *Composing Programs*
  `http://composingprograms.com/`
  1. Building abstractions with functions
  2. Building abstractions with data

Setting up

- Join the `#python-programming` Slack channel
  ask questions and help others
- Install Python3 and a text editor
  vim, gedit, Notepad++, Sublime Text
- Useful resources:
  - Python official documentation
    `https://docs.python.org/3/`
  - Composing Programs
    `http://composingprograms.com/`
  - Learn X in Y minutes
    `https://learnxinyminutes.com/docs/python/`