Getting Started in Python

Presented by Kieran Thompson

Kieran Thompson

- Infomechatronics Engineer
- Metrics and IoT fan
- Work primarily on the AWS platform
- Started putting things together in Python about 14 months ago

This Evenings Beginner Event

- Why Python?
- Why Do We Love Python?
- How to Start Using Python
- Let's Run Some Code
  - Command Line In Line
  - Command Line Run File
  - Integrated Development Environment
- Tools For Life
- 5 Minutes Audience Suggestions
- Questions?

Why Python?

- A report in The Economist named Python the world's most popular coding language, with steady stats and growth attributed to its flexibility as well as its straightforward, simple syntax. - *Women Who Code*

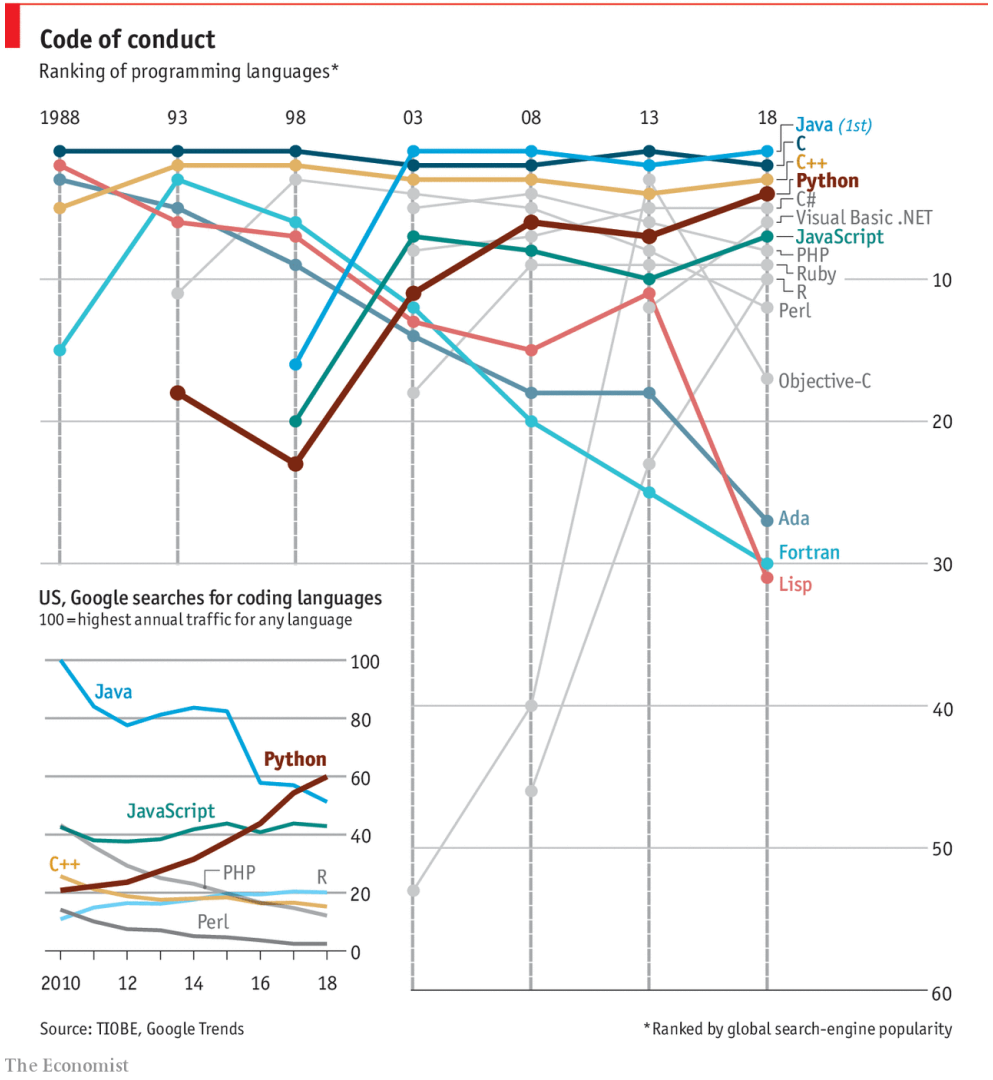
Why Do We Love Python?

The Pythonistas Say;

- Simplicity
- Flexibility
- Accessibility
- Straight forward Syntax
- Integrations
- Libraries
- Debugging
- Forgiving
- Modular

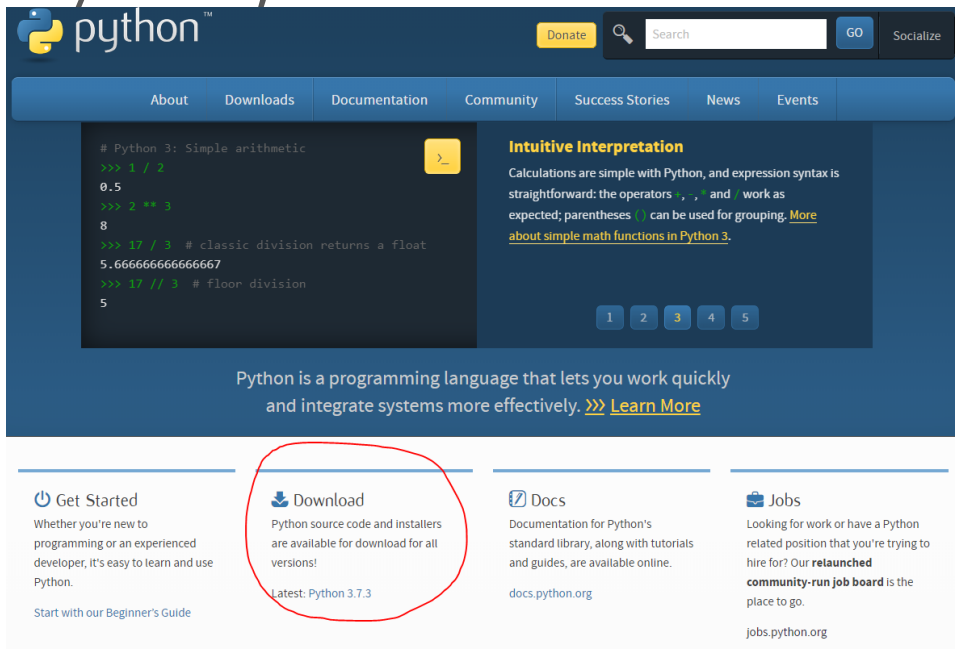
Useful For;

- Programmable Logic Devices
- Web Development
- Data Science
- Server Infrastructure
- Communications Services
- Prototyping



How to Start Using Python

- Visit https://www.python.org/
- Download an installer for your operating system;



Version	Operating System
Gzipped source tarball	Source release
XZ compressed source tarball	Source release
macOS 64-bit/32-bit installer	Mac OS X
macOS 64-bit installer	Mac OS X
Windows help file	Windows
Windows x86-64 embeddable zip file	Windows
Windows x86-64 executable installer	Windows
Windows x86-64 web-based installer	Windows
Windows x86 embeddable zip file	Windows
Windows x86 executable installer	Windows
Windows x86 web-based installer	Windows

- Run the installer.
- That's it, you can now code…. Sort of.

Let's Run Some Code

- Command Line Example
- Command Line Run File
- Coding in an Integrated Development Environment (IDE)
  - Visual Studio Code (VSCode)
  - Fantastic VSCode Video Tutorial; https://www.youtube.com/watch?v=-nh9rCzPJ20
  - Less exciting Microsoft text tutorial; https://code.visualstudio.com/docs/python/python-tutorial

You Must!

- Use the pip package manager
  - Links into the Python Pack Index and installs packaged modules for you
  - ->> pip install requests

Tools For Life

IDEs

- PyCharm
- Atom
- Spyder
- IDLE
- Visual Studio Code

Popular Libraries

- Datetime
- NumPy
- Pandas
- SciPy

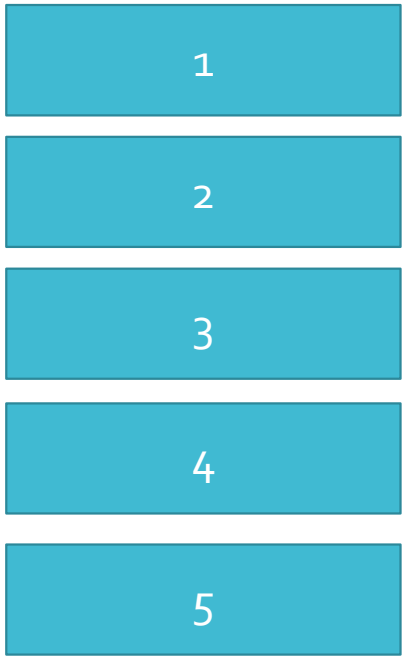
Standards

- Syntax Standards
- Testing

Other Things

- Git
- Virtual Environment

5 Minutes Audience Suggestions



- fstring for command line output
- Jupyter Notebooks
- Talk Python Podcast
- Python Byte Podcast
- Mac discontinuing pre-installed python
- Windows incorporating pre-installed python
- Be sure to ask natural language (clear) questions on help boards
- Join a community board
- Tutorials on python.org
- Homebrew
- Anaconda pre-packaged installation of Python
- Python is everywhere

Questions?

Helpful Links

- Python - https://www.python.org/
- Getting Setup - https://www.youtube.com/watch?v=YYXdXT2l-Gg
- Python VSCode Tutorial - https://www.youtube.com/watch?v=-nh9rCzPJ20
- Microsoft VSCode Tutorial - https://code.visualstudio.com/docs/python/python-tutorial

Refence Links

- Women Who Code - https://www.womenwhocode.com/blog/most-popular-coding-languages-for-2019
- The Economist - https://www.economist.com/graphic-detail/2018/07/26/python-is-becoming-the-worlds-most-popular-coding-language