# An Introduction to Programming in Python

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#### About Me

- Elvis D'Souza Pugmarks.me
- 5 years with Python Including most professional engagements
- For websites to statistics to big data to systems to random (and sometime useless) hacks





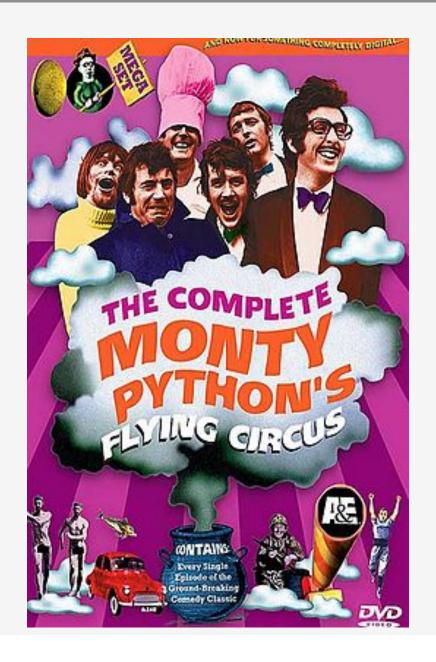














# Super brief History

- 1989 Guido Van Rossum creates Python
- 1994 Python 1.0
- 2000 Python 2.0
- 2008 Python 3.0



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### What is Python

- A high level programming language
- With emphasis on code readability
- Takes relatively fewer lines of code
- Has batteries included
- Is Free and Open Source
- Is Cross platform
- Has a wonderful Community

## **Get Python**

- Shipped with your favorite linux distribution
- Shipped with Mac OS
- Windows users download from python.org/download

**Python 2.7** is the recommended version Adoption of 3.0 will take some more time

### Who uses Python?















python.org/about/success

### Industries & Applications

- Assistive Technologies
- Code Generation
- Computer Graphics
- Configuration
- Data Mining
- Embedded Systems
- Game Development
- Legacy System Integration
- Network Development
- Real Time
- RSS aggregator
- Scalability
- Systems Administration
- Functional, Unit Testing
- User Interface
- Visual Effects
- Web Development

- Apparel Industry
- Aviation
- CRM
- Collaboration Support
- Content Management
- Document Management
- E-Commerce
- Enterprise Resource Planning
- Financial Services
- GIS and Mapping
- Hosting
- Human Resources
- Knowledge Management
- Manufacturing
- Pharmaceuticals
- Quality Control
- Relational Online Analytical Processing

- Homeland Security
- Public Safety
- Traffic Control
- Urban Infrastructure
- Bioinformatics
- Computational Chemistry
- Data Visualization
- Drug Discovery
- GIS and Mapping
- Scientific Programing
- Weather
- Energy Efficiency
- GIS and Mapping
- Lighting
- Marine
- Simulation

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#### **HANDS ON**

### A little more about Python

- Is Free and Open Source
- Great Interop especially with C, C++
- Cpython development is through Python Enhancement Proposals (PEP)
- Cpython is managed by a non-profit Python Software Foundation

#### Python **2.7.4**

- Major versions are backward incompatible
- Major releases have new features
- Bugfix releases, well, fix bugs

#### Resources

- http://anandology.com/python-practice-book/
- http://swaroopch.com/notes/Python/
- http://kushal.fedorapeople.org/book/
- http://nibrahim.net.in/self-defence/
- http://www.python.org
- http://bangalore.python.org.in/
- http://in.pycon.org/2013/
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