

First Steps with Python



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Course Outline



What is Python?

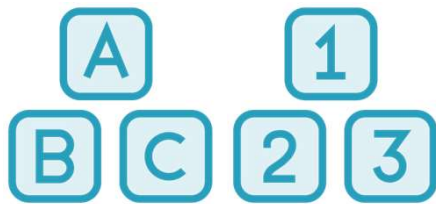
When and where is Python being used?

First steps with Python

Continuing your Python journey



What We Will Cover



The
Basics



Learning
and
Documentation



Working
with the
Code of Others



The Basics



python.org

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```
# Python 3: List comprehensions
>>> fruits = ['Banana', 'Apple', 'Lime']
>>> loud_fruits = [fruit.upper() for fruit in fruits]
>>> print(loud_fruits)
['BANANA', 'APPLE', 'LIME']

# List and the enumerate function
>>> list(enumerate(fruits))
[(0, 'Banana'), (1, 'Apple'), (2, 'Lime')]
```



Compound Data Types

Lists (known as arrays in other languages) are one of the compound data types that Python understands. Lists can be indexed, sliced and manipulated with other built-in functions. [More about lists in Python 3](#)

1

2

3

4

5

Python is a programming language that lets you work quickly and integrate systems more effectively. >>> [Learn More](#)

Get Started

Whether you're new to programming or an experienced developer, it's easy to learn and use.

Download

Python source code and installers are available for download for all versions! Not sure which version to

Docs

Documentation for Python's standard library, along with tutorials and guides, are available online.

Jobs

Looking for work or have a Python related position that you're trying to hire for? Our **relaunched**

Installing Python

python.org/downloads/windows/

Python Releases for Windows

- [Latest Python 3 Release - Python 3.6.3](#)
- [Latest Python 2 Release - Python 2.7.14](#)
- [Python 3.7.0a2 - 2017-10-17](#)
 - Download [Windows x86 web-based installer](#)
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 - Download [Windows x86-64 web-based installer](#)
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- [Python 3.6.3 - 2017-10-03](#)
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python.org/downloads/mac-osx/

Python Releases for Mac OS X

- [Latest Python 3 Release - Python 3.6.3](#)
- [Latest Python 2 Release - Python 2.7.14](#)
- [Python 3.7.0a2 - 2017-10-17](#)
 - Download [Mac OS X 64-bit/32-bit installer](#)
- [Python 3.6.3 - 2017-10-03](#)
 - Download [Mac OS X 64-bit/32-bit installer](#)
- [Python 3.7.0a1 - 2017-09-19](#)
 - Download [Mac OS X 64-bit/32-bit installer](#)
- [Python 3.6.3rc1 - 2017-09-19](#)
 - Download [Mac OS X 64-bit/32-bit installer](#)
- [Python 2.7.14 - 2017-09-16](#)
 - Download [Mac OS X 64-bit/32-bit installer](#)
 - Download [Mac OS X 32-bit i386/PPC installer](#)
- [Python 2.7.14rc1 - 2017-08-27](#)
 - Download [Mac OS X 64-bit/32-bit installer](#)
 - Download [Mac OS X 32-bit i386/PPC installer](#)
- [Python 3.5.4 - 2017-08-08](#)
 - Download [Mac OS X 64-bit/32-bit installer](#)
 - Download [Mac OS X 32-bit i386/PPC installer](#)



Command-line Installs

Windows

```
$> choco install python
```

Mac OSX

```
$> brew install python3
```



Working with Python

1. python

- Executing python file
- Rudimentary REPL

2. pip

- 3rd party libraries

3. ipython

- Robust interactive shell



Learning and Documentation



python.org/about/gettingstarted

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Python Software
@ThePSF

PyCon Canada Nov. 18-21 in Montréal,
Québec: 2017.pycon.ca. #pyconca



PyCon Canada 2017
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Python >>> About >>> Getting Started

Python For Beginners

Welcome! Are you [completely new to programming](#)? If *not* then we presume you will be looking for information about why and how to get started with Python. Fortunately an experienced programmer in any programming language (whatever it may be) can pick up Python very quickly. It's also easy for beginners to use and learn, so [jump in!](#)

Installing

Installing Python is generally easy, and nowadays many Linux and UNIX distributions include a recent Python. Even some Windows computers (notably those from HP) now come with Python already installed. If you *do* need to install Python and aren't confident about the task you can find a few notes on the [BeginnersGuide/Download](#) wiki page, but installation is unremarkable on most platforms.

Learning

Before getting started, you may want to find out which [IDEs](#) and [text editors](#) are tailored to make Python editing easy, browse the list of [introductory books](#), or look at [code samples](#) that you might find helpful.

docs.python.org

Python » English 3.6.3 Documentation »

Quick

Download

Download these documents

Docs for other versions

Python 3.7 (in development)
Python 3.5 (stable)
Python 2.7 (stable)
Old versions

Other resources

PEP Index
Beginner's Guide
Book List
Audio/Visual Talks

Python 3.6.3 documentation

Welcome! This is the documentation for Python 3.6.3.

Parts of the documentation:

[What's new in Python 3.6?](#)
or all "What's new" documents since 2.0

[Tutorial](#)
start here

[Library Reference](#)
keep this under your pillow

[Language Reference](#)
describes syntax and language elements

[Python Setup and Usage](#)
how to use Python on different platforms

[Python HOWTOs](#)
in-depth documents on specific topics

[Installing Python Modules](#)
installing from the Python Package Index & other sources

[Distributing Python Modules](#)
publishing modules for installation by others

[Extending and Embedding](#)
tutorial for C/C++ programmers

[Python/C API](#)
reference for C/C++ programmers

[FAQs](#)
frequently asked questions (with answers!)

Indices and tables:

[Global Module Index](#)
quick access to all modules

[General Index](#)
all functions, classes, terms

[Glossary](#)
the most important terms explained

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[Complete Table of Contents](#)
lists all sections and subsections



Python Release Notes

Python 3.6.3

Release Date: 2017-10-03

Python 3.6.3 is the third maintenance release of Python 3.6. The Python 3.6 series contains many new features and optimizations. See the [What's New In Python 3.6](#) document for more information.

Major new features of the 3.6 series, compared to 3.5

Among the new major new features in Python 3.6 are:

- [PEP 468](#), Preserving Keyword Argument Order
- [PEP 487](#), Simpler customization of class creation
- [PEP 495](#), Local Time Disambiguation
- [PEP 498](#), Literal String Formatting
- [PEP 506](#), Adding A Secrets Module To The Standard Library
- [PEP 509](#), Add a private version to dict
- [PEP 515](#), Underscores in Numeric Literals
- [PEP 519](#), Adding a file system path protocol
- [PEP 520](#), Preserving Class Attribute Definition Order
- [PEP 523](#), Adding a frame evaluation API to CPython
- [PEP 524](#), Make `os.urandom()` blocking on Linux (during system startup)
- [PEP 525](#), Asynchronous Generators (provisional)
- [PEP 526](#), Syntax for Variable Annotations (provisional)
- [PEP 528](#), Change Windows console encoding to UTF-8
- [PEP 529](#), Change Windows filesystem encoding to UTF-8
- [PEP 530](#), Asynchronous Comprehensions



PEP 468 -- Preserving the order of **kwargs in a function.

PEP:	468
Title:	Preserving the order of **kwargs in a function.
Author:	Eric Snow <ericsnowcurrently at gmail.com>
Discussions-To:	python-ideas at python.org
Status:	Final
Type:	Standards Track
Created:	5-Apr-2014
Python-Version:	3.6
Post-History:	5-Apr-2014,8-Sep-2016
Resolution:	https://mail.python.org/pipermail/python-dev/2016-September/146329.html

Contents

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- [Motivation](#)
- [Use Cases](#)
 - [Serialization](#)
 - [Debugging](#)
 - [Other Use Cases](#)
- [Concerns](#)
 - [Performance](#)
 - [Other Python Implementations](#)
- [Specification](#)



Pluralsight Courses

Python: Getting Started

<http://bit.ly/python-gs>

Python Fundamentals

<http://bit.ly/python-fun>

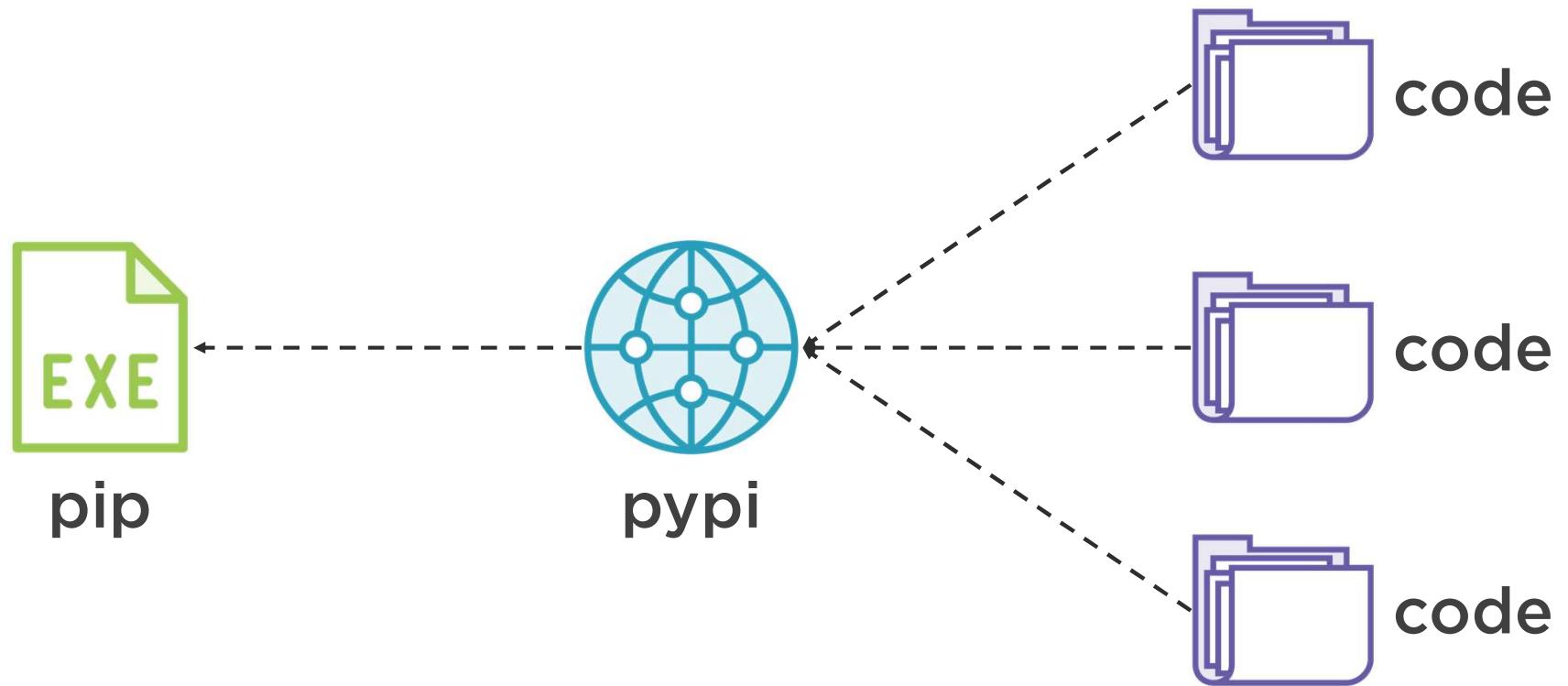
System Administration/Scripting, Web Development, Machine Learning and Data Science, Desktop Development, Embedded Scripting, and more...



Working with the Code of Others



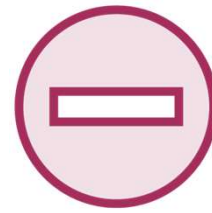
Working with the Code of Others



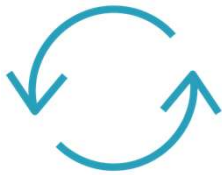
pip



Install



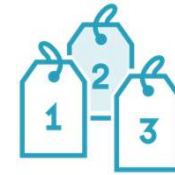
Uninstall



Dependencies



Package Groups



Versions



Installing with pip

Installing pip:

```
$> curl https://bootstrap.pypa.io/get-pip.py | python
```

Install SomePackage with pip:

```
$> pip install SomePackage
```



pypi.python.org

PACKAGE INDEX >>

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PyPI - the Python Package Index

The Python Package Index is a repository of software for the Python programming language. There are currently **124143** packages here.

To contact the PyPI admins, please use the [Support](#) or [Bug reports](#) links.

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[Nothing to report](#)

Get Packages

To use a package from this index either "[pip](#) install *package*" ([get pip](#)) or download, unpack and "python setup.py install" it.

Package Authors

Submit packages with "[python setup.py upload](#)". You can also use [twine](#)! The index [hosts package docs](#). You must [register](#). Testing? Use [testpypi](#).

Infrastructure

To interoperate with the index use the [JSON](#), [XML-RPC](#) or [HTTP](#) interfaces. Use [local mirroring or caching](#) to make installation more robust.

Updated	Package	Description
2017-12-12	baroness 1.1.2	Toolkit for easy searching and manipulation of python source code using redbaron.
2017-12-12	mtgdeck 0.0.5	MTG deck list decoder and encoder library and application
2017-12-12	parski 2.0.0.132	Helper library for parsing vpc data feed



Summary



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