URL "https://www.python.org"

Neatly display the html content

--------------------

<!DOCTYPE html>

<!--[if lt IE 7]> <html class="no-js ie6 lt-ie7 lt-ie8 lt-ie9"> <![endif]-->

<!--[if IE 7]> <html class="no-js ie7 lt-ie8 lt-ie9"> <![endif]-->

<!--[if IE 8]> <html class="no-js ie8 lt-ie9"> <![endif]-->

<!--[if gt IE 8]><!-->

<html class="no-js" dir="ltr" lang="en">

<!--<![endif]-->

<head>

<script data-domain="python.org" defer="" src="https://analytics.python.org/js/script.outbound-links.js">

</script>

<meta charset="utf-8"/>

<meta content="IE=edge" http-equiv="X-UA-Compatible"/>

<link href="//ajax.googleapis.com/ajax/libs/jquery/1.8.2/jquery.min.js" rel="prefetch"/>

<link href="//ajax.googleapis.com/ajax/libs/jqueryui/1.12.1/jquery-ui.min.js" rel="prefetch"/>

<meta content="Python.org" name="application-name"/>

<meta content="The official home of the Python Programming Language" name="msapplication-tooltip"/>

<meta content="Python.org" name="apple-mobile-web-app-title"/>

<meta content="yes" name="apple-mobile-web-app-capable"/>

<meta content="black" name="apple-mobile-web-app-status-bar-style"/>

<meta content="width=device-width, initial-scale=1.0" name="viewport"/>

<meta content="True" name="HandheldFriendly"/>

<meta content="telephone=no" name="format-detection"/>

<meta content="on" http-equiv="cleartype"/>

<meta content="false" http-equiv="imagetoolbar"/>

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</script>

<script src="/static/js/libs/modernizr.js">

</script>

<link href="/static/stylesheets/style.08a078d0aa02.css" media="all" rel="stylesheet" title="default" type="text/css">

<link href="/static/stylesheets/mq.98d6092b2ada.css" media="not print, braille, embossed, speech, tty" rel="stylesheet" type="text/css">

<link href="/static/stylesheets/no-mq.bf0c425cdb73.css" media="screen" rel="stylesheet" type="text/css"/>

<!--[if (lte IE 8)&(!IEMobile)]>

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<![endif]-->

<link href="//ajax.googleapis.com/ajax/libs/jqueryui/1.12.1/themes/smoothness/jquery-ui.css" rel="stylesheet"/>

<link href="/static/favicon.ico" rel="icon" type="image/x-icon"/>

<link href="/static/apple-touch-icon-144x144-precomposed.png" rel="apple-touch-icon-precomposed" sizes="144x144"/>

<link href="/static/apple-touch-icon-114x114-precomposed.png" rel="apple-touch-icon-precomposed" sizes="114x114"/>

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<link href="/static/apple-touch-icon-precomposed.png" rel="apple-touch-icon-precomposed"/>

<link href="/static/apple-touch-icon-precomposed.png" rel="apple-touch-icon"/>

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<!-- white shape -->

<meta content="#3673a5" name="msapplication-TileColor"/>

<!-- python blue -->

<meta content="#3673a5" name="msapplication-navbutton-color"/>

<title>

Welcome to Python.org

</title>

<meta content="The official home of the Python Programming Language" name="description"/>

<meta content="Python programming language object oriented web free open source software license documentation download community" name="keywords"/>

<meta content="website" property="og:type"/>

<meta content="Python.org" property="og:site\_name"/>

<meta content="Welcome to Python.org" property="og:title"/>

<meta content="The official home of the Python Programming Language" property="og:description"/>

<meta content="https://www.python.org/static/opengraph-icon-200x200.png" property="og:image"/>

<meta content="https://www.python.org/static/opengraph-icon-200x200.png" property="og:image:secure\_url"/>

<meta content="https://www.python.org/" property="og:url"/>

<link href="/humans.txt" rel="author"/>

<link href="https://peps.python.org/peps.rss" rel="alternate" title="Python Enhancement Proposals" type="application/rss+xml"/>

<link href="https://www.python.org/jobs/feed/rss/" rel="alternate" title="Python Job Opportunities" type="application/rss+xml"/>

<link href="https://feeds.feedburner.com/PythonSoftwareFoundationNews" rel="alternate" title="Python Software Foundation News" type="application/rss+xml"/>

<link href="https://feeds.feedburner.com/PythonInsider" rel="alternate" title="Python Insider" type="application/rss+xml"/>

<link href="https://www.python.org/downloads/feed.rss" rel="alternate" title="Python Releases" type="application/rss+xml"/>

<script type="application/ld+json">

{

"@context": "https://schema.org",

"@type": "WebSite",

"url": "https://www.python.org/",

"potentialAction": {

"@type": "SearchAction",

"target": "https://www.python.org/search/?q={search\_term\_string}",

"query-input": "required name=search\_term\_string"

}

}

</script>

<script type="text/javascript">

var \_gaq = \_gaq || [];

\_gaq.push(['\_setAccount', 'UA-39055973-1']);

\_gaq.push(['\_trackPageview']);

(function() {

var ga = document.createElement('script'); ga.type = 'text/javascript'; ga.async = true;

ga.src = ('https:' == document.location.protocol ? 'https://ssl' : 'http://www') + '.google-analytics.com/ga.js';

var s = document.getElementsByTagName('script')[0]; s.parentNode.insertBefore(ga, s);

})();

</script>

</link>

</link>

</head>

<body class="python home" id="homepage">

<div id="touchnav-wrapper">

<div class="do-not-print" id="nojs">

<p>

<strong>

Notice:

</strong>

While JavaScript is not essential for this website, your interaction with the content will be limited. Please turn JavaScript on for the full experience.

</p>

</div>

<!--[if lte IE 8]>

<div id="oldie-warning" class="do-not-print">

<p>

<strong>Notice:</strong> Your browser is <em>ancient</em>. Please

<a href="http://browsehappy.com/">upgrade to a different browser</a> to experience a better web.

</p>

</div>

<![endif]-->

<!-- Sister Site Links -->

<div class="top-bar do-not-print" id="top">

<nav class="meta-navigation container" role="navigation">

<div class="skip-link screen-reader-text">

<a href="#content" title="Skip to content">

Skip to content

</a>

</div>

<a aria-hidden="true" class="jump-link" href="#python-network" id="close-python-network">

<span aria-hidden="true" class="icon-arrow-down">

<span>

▼

</span>

</span>

Close

</a>

<ul class="menu" role="tree">

<li class="python-meta current\_item selectedcurrent\_branch selected">

<a class="current\_item selectedcurrent\_branch selected" href="/" title="The Python Programming Language">

Python

</a>

</li>

<li class="psf-meta">

<a href="https://www.python.org/psf/" title="The Python Software Foundation">

PSF

</a>

</li>

<li class="docs-meta">

<a href="https://docs.python.org" title="Python Documentation">

Docs

</a>

</li>

<li class="pypi-meta">

<a href="https://pypi.org/" title="Python Package Index">

PyPI

</a>

</li>

<li class="jobs-meta">

<a href="/jobs/" title="Python Job Board">

Jobs

</a>

</li>

<li class="shop-meta">

<a href="/community/">

Community

</a>

</li>

</ul>

<a aria-hidden="true" class="jump-link" href="#top" id="python-network">

<span aria-hidden="true" class="icon-arrow-up">

<span>

▲

</span>

</span>

The Python Network

</a>

</nav>

</div>

<!-- Header elements -->

<header class="main-header" role="banner">

<div class="container">

<h1 class="site-headline">

<a href="/">

<img alt="python™" class="python-logo" src="/static/img/python-logo.png"/>

</a>

</h1>

<div class="options-bar-container do-not-print">

<a class="donate-button" href="https://psfmember.org/civicrm/contribute/transact?reset=1&amp;id=2">

Donate

</a>

<div class="options-bar">

<a class="jump-to-menu" href="#site-map" id="site-map-link">

<span class="menu-icon">

≡

</span>

Menu

</a>

<form action="/search/" class="search-the-site" method="get">

<fieldset title="Search Python.org">

<span aria-hidden="true" class="icon-search">

</span>

<label class="screen-reader-text" for="id-search-field">

Search This Site

</label>

<input class="search-field" id="id-search-field" name="q" placeholder="Search" role="textbox" tabindex="1" type="search" value=""/>

<button class="search-button" id="submit" name="submit" tabindex="3" title="Submit this Search" type="submit">

GO

</button>

<!--[if IE]><input type="text" style="display: none;" disabled="disabled" size="1" tabindex="4"><![endif]-->

</fieldset>

</form>

<span class="breaker">

</span>

<div aria-hidden="true" class="adjust-font-size">

<ul aria-label="Adjust Text Size on Page" class="navigation menu">

<li aria-haspopup="true" class="tier-1 last">

<a class="action-trigger" href="#">

<strong>

<small>

A

</small>

A

</strong>

</a>

<ul class="subnav menu">

<li class="tier-2 element-1" role="treeitem">

<a class="text-shrink" href="javascript:;" title="Make Text Smaller">

Smaller

</a>

</li>

<li class="tier-2 element-2" role="treeitem">

<a class="text-grow" href="javascript:;" title="Make Text Larger">

Larger

</a>

</li>

<li class="tier-2 element-3" role="treeitem">

<a class="text-reset" href="javascript:;" title="Reset any font size changes I have made">

Reset

</a>

</li>

</ul>

</li>

</ul>

</div>

<div class="winkwink-nudgenudge">

<ul aria-label="Social Media Navigation" class="navigation menu">

<li aria-haspopup="true" class="tier-1 last">

<a class="action-trigger" href="#">

Socialize

</a>

<ul class="subnav menu">

<li class="tier-2 element-1" role="treeitem">

<a href="https://www.linkedin.com/company/python-software-foundation/">

<i aria-hidden="true" class="fa fa-linkedin-square">

</i>

LinkedIn

</a>

</li>

<li class="tier-2 element-2" role="treeitem">

<a href="https://fosstodon.org/@ThePSF">

<span aria-hidden="true" class="icon-mastodon">

</span>

Mastodon

</a>

</li>

<li class="tier-2 element-3" role="treeitem">

<a href="/community/irc/">

<span aria-hidden="true" class="icon-freenode">

</span>

Chat on IRC

</a>

</li>

<li class="tier-2 element-4" role="treeitem">

<a href="https://twitter.com/ThePSF">

<span aria-hidden="true" class="icon-twitter">

</span>

Twitter

</a>

</li>

</ul>

</li>

</ul>

</div>

<span data-html-include="/authenticated">

</span>

</div>

<!-- end options-bar -->

</div>

<nav class="python-navigation main-navigation do-not-print" id="mainnav" role="navigation">

<ul aria-label="Main Navigation" class="navigation menu" role="menubar">

<li aria-haspopup="true" class="tier-1 element-1" id="about">

<a class="" href="/about/" title="">

About

</a>

<ul aria-hidden="true" class="subnav menu" role="menu">

<li class="tier-2 element-1" role="treeitem">

<a href="/about/apps/" title="">

Applications

</a>

</li>

<li class="tier-2 element-2" role="treeitem">

<a href="/about/quotes/" title="">

Quotes

</a>

</li>

<li class="tier-2 element-3" role="treeitem">

<a href="/about/gettingstarted/" title="">

Getting Started

</a>

</li>

<li class="tier-2 element-4" role="treeitem">

<a href="/about/help/" title="">

Help

</a>

</li>

<li class="tier-2 element-5" role="treeitem">

<a href="http://brochure.getpython.info/" title="">

Python Brochure

</a>

</li>

</ul>

</li>

<li aria-haspopup="true" class="tier-1 element-2" id="downloads">

<a class="" href="/downloads/" title="">

Downloads

</a>

<ul aria-hidden="true" class="subnav menu" role="menu">

<li class="tier-2 element-1" role="treeitem">

<a href="/downloads/" title="">

All releases

</a>

</li>

<li class="tier-2 element-2" role="treeitem">

<a href="/downloads/source/" title="">

Source code

</a>

</li>

<li class="tier-2 element-3" role="treeitem">

<a href="/downloads/windows/" title="">

Windows

</a>

</li>

<li class="tier-2 element-4" role="treeitem">

<a href="/downloads/macos/" title="">

macOS

</a>

</li>

<li class="tier-2 element-5" role="treeitem">

<a href="/download/other/" title="">

Other Platforms

</a>

</li>

<li class="tier-2 element-6" role="treeitem">

<a href="https://docs.python.org/3/license.html" title="">

License

</a>

</li>

<li class="tier-2 element-7" role="treeitem">

<a href="/download/alternatives" title="">

Alternative Implementations

</a>

</li>

</ul>

</li>

<li aria-haspopup="true" class="tier-1 element-3" id="documentation">

<a class="" href="/doc/" title="">

Documentation

</a>

<ul aria-hidden="true" class="subnav menu" role="menu">

<li class="tier-2 element-1" role="treeitem">

<a href="/doc/" title="">

Docs

</a>

</li>

<li class="tier-2 element-2" role="treeitem">

<a href="/doc/av" title="">

Audio/Visual Talks

</a>

</li>

<li class="tier-2 element-3" role="treeitem">

<a href="https://wiki.python.org/moin/BeginnersGuide" title="">

Beginner's Guide

</a>

</li>

<li class="tier-2 element-4" role="treeitem">

<a href="https://devguide.python.org/" title="">

Developer's Guide

</a>

</li>

<li class="tier-2 element-5" role="treeitem">

<a href="https://docs.python.org/faq/" title="">

FAQ

</a>

</li>

<li class="tier-2 element-6" role="treeitem">

<a href="http://wiki.python.org/moin/Languages" title="">

Non-English Docs

</a>

</li>

<li class="tier-2 element-7" role="treeitem">

<a href="https://peps.python.org" title="">

PEP Index

</a>

</li>

<li class="tier-2 element-8" role="treeitem">

<a href="https://wiki.python.org/moin/PythonBooks" title="">

Python Books

</a>

</li>

<li class="tier-2 element-9" role="treeitem">

<a href="/doc/essays/" title="">

Python Essays

</a>

</li>

</ul>

</li>

<li aria-haspopup="true" class="tier-1 element-4" id="community">

<a class="" href="/community/" title="">

Community

</a>

<ul aria-hidden="true" class="subnav menu" role="menu">

<li class="tier-2 element-1" role="treeitem">

<a href="/community/diversity/" title="">

Diversity

</a>

</li>

<li class="tier-2 element-2" role="treeitem">

<a href="/community/lists/" title="">

Mailing Lists

</a>

</li>

<li class="tier-2 element-3" role="treeitem">

<a href="/community/irc/" title="">

IRC

</a>

</li>

<li class="tier-2 element-4" role="treeitem">

<a href="/community/forums/" title="">

Forums

</a>

</li>

<li class="tier-2 element-5" role="treeitem">

<a href="/psf/annual-report/2024/" title="">

PSF Annual Impact Report

</a>

</li>

<li class="tier-2 element-6" role="treeitem">

<a href="/community/workshops/" title="">

Python Conferences

</a>

</li>

<li class="tier-2 element-7" role="treeitem">

<a href="/community/sigs/" title="">

Special Interest Groups

</a>

</li>

<li class="tier-2 element-8" role="treeitem">

<a href="/community/logos/" title="">

Python Logo

</a>

</li>

<li class="tier-2 element-9" role="treeitem">

<a href="https://wiki.python.org/moin/" title="">

Python Wiki

</a>

</li>

<li class="tier-2 element-10" role="treeitem">

<a href="/psf/conduct/" title="">

Code of Conduct

</a>

</li>

<li class="tier-2 element-11" role="treeitem">

<a href="/community/awards" title="">

Community Awards

</a>

</li>

<li class="tier-2 element-12" role="treeitem">

<a href="/psf/get-involved/" title="">

Get Involved

</a>

</li>

<li class="tier-2 element-13" role="treeitem">

<a href="/psf/community-stories/" title="">

Shared Stories

</a>

</li>

</ul>

</li>

<li aria-haspopup="true" class="tier-1 element-5" id="success-stories">

<a class="" href="/success-stories/" title="success-stories">

Success Stories

</a>

<ul aria-hidden="true" class="subnav menu" role="menu">

<li class="tier-2 element-1" role="treeitem">

<a href="/success-stories/category/arts/" title="">

Arts

</a>

</li>

<li class="tier-2 element-2" role="treeitem">

<a href="/success-stories/category/business/" title="">

Business

</a>

</li>

<li class="tier-2 element-3" role="treeitem">

<a href="/success-stories/category/education/" title="">

Education

</a>

</li>

<li class="tier-2 element-4" role="treeitem">

<a href="/success-stories/category/engineering/" title="">

Engineering

</a>

</li>

<li class="tier-2 element-5" role="treeitem">

<a href="/success-stories/category/government/" title="">

Government

</a>

</li>

<li class="tier-2 element-6" role="treeitem">

<a href="/success-stories/category/scientific/" title="">

Scientific

</a>

</li>

<li class="tier-2 element-7" role="treeitem">

<a href="/success-stories/category/software-development/" title="">

Software Development

</a>

</li>

</ul>

</li>

<li aria-haspopup="true" class="tier-1 element-6" id="news">

<a class="" href="/blogs/" title="News from around the Python world">

News

</a>

<ul aria-hidden="true" class="subnav menu" role="menu">

<li class="tier-2 element-1" role="treeitem">

<a href="/blogs/" title="Python Insider Blog Posts">

Python News

</a>

</li>

<li class="tier-2 element-2" role="treeitem">

<a href="/psf/newsletter/" title="Python Software Foundation Newsletter">

PSF Newsletter

</a>

</li>

<li class="tier-2 element-3" role="treeitem">

<a href="http://pyfound.blogspot.com/" title="PSF Blog">

PSF News

</a>

</li>

<li class="tier-2 element-4" role="treeitem">

<a href="http://pycon.blogspot.com/" title="PyCon Blog">

PyCon US News

</a>

</li>

<li class="tier-2 element-5" role="treeitem">

<a href="http://planetpython.org/" title="Planet Python">

News from the Community

</a>

</li>

</ul>

</li>

<li aria-haspopup="true" class="tier-1 element-7" id="events">

<a class="" href="/events/" title="">

Events

</a>

<ul aria-hidden="true" class="subnav menu" role="menu">

<li class="tier-2 element-1" role="treeitem">

<a href="/events/python-events/" title="">

Python Events

</a>

</li>

<li class="tier-2 element-2" role="treeitem">

<a href="/events/python-user-group/" title="">

User Group Events

</a>

</li>

<li class="tier-2 element-3" role="treeitem">

<a href="/events/python-events/past/" title="">

Python Events Archive

</a>

</li>

<li class="tier-2 element-4" role="treeitem">

<a href="/events/python-user-group/past/" title="">

User Group Events Archive

</a>

</li>

<li class="tier-2 element-5" role="treeitem">

<a href="https://wiki.python.org/moin/PythonEventsCalendar#Submitting\_an\_Event" title="">

Submit an Event

</a>

</li>

</ul>

</li>

</ul>

</nav>

<div class="header-banner">

<!-- for optional "do-not-print" class -->

<div class="flex-slideshow slideshow" id="dive-into-python">

<ul class="launch-shell menu" id="launch-shell">

<li>

<a class="button prompt" data-shell-container="#dive-into-python" href="/shell/" id="start-shell">

&gt;\_

<span class="message">

Launch Interactive Shell

</span>

</a>

</li>

</ul>

<ul class="slides menu">

<li>

<div class="slide-code">

<pre><code><span class="comment"># Python 3: Fibonacci series up to n</span>

&gt;&gt;&gt; def fib(n):

&gt;&gt;&gt; a, b = 0, 1

&gt;&gt;&gt; while a &lt; n:

&gt;&gt;&gt; print(a, end=' ')

&gt;&gt;&gt; a, b = b, a+b

&gt;&gt;&gt; print()

&gt;&gt;&gt; fib(1000)

<span class="output">0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987</span></code></pre>

</div>

<div class="slide-copy">

<h1>

Functions Defined

</h1>

<p>

The core of extensible programming is defining functions. Python allows mandatory and optional arguments, keyword arguments, and even arbitrary argument lists.

<a href="//docs.python.org/3/tutorial/controlflow.html#defining-functions">

More about defining functions in Python 3

</a>

</p>

</div>

</li>

<li>

<div class="slide-code">

<pre><code><span class="comment"># Python 3: List comprehensions</span>

&gt;&gt;&gt; fruits = ['Banana', 'Apple', 'Lime']

&gt;&gt;&gt; loud\_fruits = [fruit.upper() for fruit in fruits]

&gt;&gt;&gt; print(loud\_fruits)

<span class="output">['BANANA', 'APPLE', 'LIME']</span>

<span class="comment"># List and the enumerate function</span>

&gt;&gt;&gt; list(enumerate(fruits))

<span class="output">[(0, 'Banana'), (1, 'Apple'), (2, 'Lime')]</span></code></pre>

</div>

<div class="slide-copy">

<h1>

Compound Data Types

</h1>

<p>

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.

<a href="//docs.python.org/3/tutorial/introduction.html#lists">

More about lists in Python 3

</a>

</p>

</div>

</li>

<li>

<div class="slide-code">

<pre><code><span class="comment"># Python 3: Simple arithmetic</span>

&gt;&gt;&gt; 1 / 2

<span class="output">0.5</span>

&gt;&gt;&gt; 2 \*\* 3

<span class="output">8</span>

&gt;&gt;&gt; 17 / 3 <span class="comment"># classic division returns a float</span>

<span class="output">5.666666666666667</span>

&gt;&gt;&gt; 17 // 3 <span class="comment"># floor division</span>

<span class="output">5</span></code></pre>

</div>

<div class="slide-copy">

<h1>

Intuitive Interpretation

</h1>

<p>

Calculations are simple with Python, and expression syntax is straightforward: the operators

<code>

+

</code>

,

<code>

-

</code>

,

<code>

\*

</code>

and

<code>

/

</code>

work as expected; parentheses

<code>

()

</code>

can be used for grouping.

<a href="http://docs.python.org/3/tutorial/introduction.html#using-python-as-a-calculator">

More about simple math functions in Python 3

</a>

.

</p>

</div>

</li>

<li>

<div class="slide-code">

<pre><code><span class="comment"># For loop on a list</span>

&gt;&gt;&gt; numbers = [2, 4, 6, 8]

&gt;&gt;&gt; product = 1

&gt;&gt;&gt; for number in numbers:

... product = product \* number

...

&gt;&gt;&gt; print('The product is:', product)

<span class="output">The product is: 384</span></code></pre>

</div>

<div class="slide-copy">

<h1>

All the Flow You’d Expect

</h1>

<p>

Python knows the usual control flow statements that other languages speak —

<code>

if

</code>

,

<code>

for

</code>

,

<code>

while

</code>

and

<code>

range

</code>

— with some of its own twists, of course.

<a href="//docs.python.org/3/tutorial/controlflow.html">

More control flow tools in Python 3

</a>

</p>

</div>

</li>

<li>

<div class="slide-code">

<pre><code><span class="comment"># Simple output (with Unicode)</span>

&gt;&gt;&gt; print("Hello, I'm Python!")

<span class="output">Hello, I'm Python!</span>

<span class="comment"># Input, assignment</span>

&gt;&gt;&gt; name = input('What is your name?\n')

<span class="output">What is your name?

Python</span>

&gt;&gt;&gt; print(f'Hi, {name}.')

<span class="output">Hi, Python.</span></code>

</pre>

</div>

<div class="slide-copy">

<h1>

Quick &amp; Easy to Learn

</h1>

<p>

Experienced programmers in any other language can pick up Python very quickly, and beginners find the clean syntax and indentation structure easy to learn.

<a href="//docs.python.org/3/tutorial/">

Whet your appetite

</a>

with our Python 3 overview.

</p>

</div>

</li>

</ul>

</div>

</div>

<div class="introduction">

<p>

Python is a programming language that lets you work quickly

<span class="breaker">

</span>

and integrate systems more effectively.

<a class="readmore" href="/doc/">

Learn More

</a>

</p>

</div>

</div>

<!-- end .container -->

</header>

<div class="content-wrapper" id="content">

<!-- Main Content Column -->

<div class="container">

<section class="main-content" role="main">

<div class="row">

<div class="small-widget get-started-widget">

<h2 class="widget-title">

<span aria-hidden="true" class="icon-get-started">

</span>

Get Started

</h2>

<p>

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

</p>

<p>

<a href="/about/gettingstarted/">

Start with our Beginner’s Guide

</a>

</p>

</div>

<div class="small-widget download-widget">

<h2 class="widget-title">

<span aria-hidden="true" class="icon-download">

</span>

Download

</h2>

<p>

Python source code and installers are available for download for all versions!

</p>

<p>

Latest:

<a href="/downloads/release/python-3135/">

Python 3.13.5

</a>

</p>

</div>

<div class="small-widget documentation-widget">

<h2 class="widget-title">

<span aria-hidden="true" class="icon-documentation">

</span>

Docs

</h2>

<p>

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

</p>

<p>

<a href="https://docs.python.org">

docs.python.org

</a>

</p>

</div>

<div class="small-widget jobs-widget last">

<h2 class="widget-title">

<span aria-hidden="true" class="icon-jobs">

</span>

Jobs

</h2>

<p>

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

<strong>

relaunched community-run job board

</strong>

is the place to go.

</p>

<p>

<a href="//jobs.python.org">

jobs.python.org

</a>

</p>

</div>

</div>

<div class="list-widgets row">

<div class="medium-widget blog-widget">

<div class="shrubbery">

<h2 class="widget-title">

<span aria-hidden="true" class="icon-news">

</span>

Latest News

</h2>

<p class="give-me-more">

<a href="https://blog.python.org" title="More News">

More

</a>

</p>

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<span class="say-no-more">

2025-

</span>

07-24

</time>

<a href="https://pyfound.blogspot.com/2025/07/psf-board-nominations-opening-july-29th.html">

PSF Board Election Nominations Opening July 29th

</a>

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2025-

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07-22

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<a href="https://pythoninsider.blogspot.com/2025/07/python-314-release-candidate-1-is-go.html">

Python 3.14 release candidate 1 is go!

</a>

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2025-

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07-16

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<a href="https://pyfound.blogspot.com/2025/07/affirm-your-psf-membership-voting-status.html">

Affirm Your PSF Membership Voting Status

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2025-

</span>

07-09

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<a href="https://mailchi.mp/python/python-software-foundation-july-2024-newsletter-19880429">

PSF News: PyPI Orgs, Board Election, &amp; Yearly Reports

</a>

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2025-

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07-08

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<a href="https://pyfound.blogspot.com/2025/07/notice-of-python-software-foundation.html">

Notice of Python Software Foundation Bylaws Change - Effective July 23, 2025

</a>

</li>

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<!-- end .shrubbery -->

</div>

<div class="medium-widget event-widget last">

<div class="shrubbery">

<h2 class="widget-title">

<span aria-hidden="true" class="icon-calendar">

</span>

Upcoming Events

</h2>

<p class="give-me-more">

<a href="/events/calendars/" title="More Events">

More

</a>

</p>

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2025-

</span>

08-08

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<a href="/events/python-user-group/2081/">

Buea - Creating Python Communities and outreach

</a>

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08-11

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DjangoCon Africa 2025

</a>

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2025-

</span>

08-13

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PyCon Somalia 2025

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2025-

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08-15

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PyCon Korea 2025

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2025-

</span>

08-18

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EuroSciPy 2025

</a>

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<div class="row">

<div class="medium-widget success-stories-widget">

<div class="shrubbery">

<h2 class="widget-title">

<span aria-hidden="true" class="icon-success-stories">

</span>

Success Stories

</h2>

<p class="give-me-more">

<a href="/success-stories/" title="More Success Stories">

More

</a>

</p>

<div class="success-story-item" id="success-story-1211">

<blockquote>

<a href="/success-stories/reimagining-data-science-with-python-based-operators-in-einblicks-visual-canvas/">

Einblick reimagines the modern data science workflow in a collaborative data science canvas, rather than a linear notebook. Working in a canvas environment offers many advantages including live collaboration, an expansive visual interface, and a progressive computation engine. In this article, we’ll highlight one of the key ways we’re saving data scientists time–our operators. We’ll go through a couple of our core operators, why Python is such a crucial part of our software solution, and how we augmented our offerings with a user operator interface. The latter allows users to customize and use their own operators, which can be used in any Einblick canvas, and shared with other Einblick users.

</a>

</blockquote>

<table border="0" cellpadding="0" cellspacing="0" class="quote-from" width="100%">

<tbody>

<tr>

<td>

<p>

<a href="/success-stories/reimagining-data-science-with-python-based-operators-in-einblicks-visual-canvas/">

Reimagining data science with Python-based operators in Einblick’s visual canvas

</a>

<em>

by Becca Weng

</em>

</p>

</td>

</tr>

</tbody>

</table>

</div>

</div>

<!-- end .shrubbery -->

</div>

<div class="medium-widget applications-widget last">

<div class="shrubbery">

<h2 class="widget-title">

<span aria-hidden="true" class="icon-python">

</span>

Use Python for…

</h2>

<p class="give-me-more">

<a href="/about/apps" title="More Applications">

More

</a>

</p>

<ul class="menu">

<li>

<b>

Web Development

</b>

:

<span class="tag-wrapper">

<a class="tag" href="http://www.djangoproject.com/">

Django

</a>

,

<a class="tag" href="http://www.pylonsproject.org/">

Pyramid

</a>

,

<a class="tag" href="http://bottlepy.org">

Bottle

</a>

,

<a class="tag" href="http://tornadoweb.org">

Tornado

</a>

,

<a class="tag" href="http://flask.pocoo.org/">

Flask

</a>

,

<a class="tag" href="http://www.web2py.com/">

web2py

</a>

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GUI Development

</b>

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<a class="tag" href="http://wiki.python.org/moin/TkInter">

tkInter

</a>

,

<a class="tag" href="https://wiki.gnome.org/Projects/PyGObject">

PyGObject

</a>

,

<a class="tag" href="http://www.riverbankcomputing.co.uk/software/pyqt/intro">

PyQt

</a>

,

<a class="tag" href="https://wiki.qt.io/PySide">

PySide

</a>

,

<a class="tag" href="https://kivy.org/">

Kivy

</a>

,

<a class="tag" href="http://www.wxpython.org/">

wxPython

</a>

,

<a class="tag" href="https://dearpygui.readthedocs.io/en/latest/">

DearPyGui

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Scientific and Numeric

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<a class="tag" href="http://www.scipy.org">

SciPy

</a>

,

<a class="tag" href="http://pandas.pydata.org/">

Pandas

</a>

,

<a class="tag" href="http://ipython.org">

IPython

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Software Development

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<a class="tag" href="http://buildbot.net/">

Buildbot

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,

<a class="tag" href="http://trac.edgewall.org/">

Trac

</a>

,

<a class="tag" href="http://roundup.sourceforge.net/">

Roundup

</a>

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System Administration

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<a class="tag" href="http://www.ansible.com">

Ansible

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,

<a class="tag" href="https://saltproject.io">

Salt

</a>

,

<a class="tag" href="https://www.openstack.org">

OpenStack

</a>

,

<a class="tag" href="https://xon.sh">

xonsh

</a>

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<!-- end .shrubbery -->

</div>

</div>

<div class="psf-widget">

<div class="python-logo">

</div>

<h2 class="widget-title">

<span class="prompt">

&gt;&gt;&gt;

</span>

<a href="/psf/">

Python Software Foundation

</a>

</h2>

<p>

The mission of the Python Software Foundation is to promote, protect, and advance the Python programming language, and to support and facilitate the growth of a diverse and international community of Python programmers.

<a class="readmore" href="/psf/">

Learn more

</a>

</p>

<p class="click-these">

<a class="button" href="/psf/membership/">

Become a Member

</a>

<a class="button" href="/psf/donations/">

Donate to the PSF

</a>

</p>

</div>

</section>

</div>

<!-- end .container -->

</div>

<!-- end #content .content-wrapper -->

<!-- Footer and social media list -->

<footer class="main-footer" id="site-map" role="contentinfo">

<div class="main-footer-links">

<div class="container">

<a class="jump-link" href="#python-network" id="back-to-top-1">

<span aria-hidden="true" class="icon-arrow-up">

<span>

▲

</span>

</span>

Back to Top

</a>

<ul class="sitemap navigation menu do-not-print" id="container" role="tree">

<li class="tier-1 element-1">

<a href="/about/">

About

</a>

<ul class="subnav menu">

<li class="tier-2 element-1" role="treeitem">

<a href="/about/apps/" title="">

Applications

</a>

</li>

<li class="tier-2 element-2" role="treeitem">

<a href="/about/quotes/" title="">

Quotes

</a>

</li>

<li class="tier-2 element-3" role="treeitem">

<a href="/about/gettingstarted/" title="">

Getting Started

</a>

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<li class="tier-2 element-4" role="treeitem">

<a href="/about/help/" title="">

Help

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</li>

<li class="tier-2 element-5" role="treeitem">

<a href="http://brochure.getpython.info/" title="">

Python Brochure

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<li class="tier-1 element-2">

<a href="/downloads/">

Downloads

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<ul class="subnav menu">

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<a href="/downloads/" title="">

All releases

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<li class="tier-2 element-2" role="treeitem">

<a href="/downloads/source/" title="">

Source code

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<li class="tier-2 element-3" role="treeitem">

<a href="/downloads/windows/" title="">

Windows

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<li class="tier-2 element-4" role="treeitem">

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macOS

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<li class="tier-2 element-5" role="treeitem">

<a href="/download/other/" title="">

Other Platforms

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<li class="tier-2 element-6" role="treeitem">

<a href="https://docs.python.org/3/license.html" title="">

License

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<li class="tier-2 element-7" role="treeitem">

<a href="/download/alternatives" title="">

Alternative Implementations

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<li class="tier-1 element-3">

<a href="/doc/">

Documentation

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<ul class="subnav menu">

<li class="tier-2 element-1" role="treeitem">

<a href="/doc/" title="">

Docs

</a>

</li>

<li class="tier-2 element-2" role="treeitem">

<a href="/doc/av" title="">

Audio/Visual Talks

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<li class="tier-2 element-3" role="treeitem">

<a href="https://wiki.python.org/moin/BeginnersGuide" title="">

Beginner's Guide

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<li class="tier-2 element-4" role="treeitem">

<a href="https://devguide.python.org/" title="">

Developer's Guide

</a>

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<li class="tier-2 element-5" role="treeitem">

<a href="https://docs.python.org/faq/" title="">

FAQ

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<a href="http://wiki.python.org/moin/Languages" title="">

Non-English Docs

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<li class="tier-2 element-7" role="treeitem">

<a href="https://peps.python.org" title="">

PEP Index

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<li class="tier-2 element-8" role="treeitem">

<a href="https://wiki.python.org/moin/PythonBooks" title="">

Python Books

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<li class="tier-2 element-9" role="treeitem">

<a href="/doc/essays/" title="">

Python Essays

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<li class="tier-1 element-4">

<a href="/community/">

Community

</a>

<ul class="subnav menu">

<li class="tier-2 element-1" role="treeitem">

<a href="/community/diversity/" title="">

Diversity

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<li class="tier-2 element-2" role="treeitem">

<a href="/community/lists/" title="">

Mailing Lists

</a>

</li>

<li class="tier-2 element-3" role="treeitem">

<a href="/community/irc/" title="">

IRC

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<li class="tier-2 element-4" role="treeitem">

<a href="/community/forums/" title="">

Forums

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<li class="tier-2 element-5" role="treeitem">

<a href="/psf/annual-report/2024/" title="">

PSF Annual Impact Report

</a>

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<li class="tier-2 element-6" role="treeitem">

<a href="/community/workshops/" title="">

Python Conferences

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<li class="tier-2 element-7" role="treeitem">

<a href="/community/sigs/" title="">

Special Interest Groups

</a>

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<li class="tier-2 element-8" role="treeitem">

<a href="/community/logos/" title="">

Python Logo

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<li class="tier-2 element-9" role="treeitem">

<a href="https://wiki.python.org/moin/" title="">

Python Wiki

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<li class="tier-2 element-10" role="treeitem">

<a href="/psf/conduct/" title="">

Code of Conduct

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<li class="tier-2 element-11" role="treeitem">

<a href="/community/awards" title="">

Community Awards

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<li class="tier-2 element-12" role="treeitem">

<a href="/psf/get-involved/" title="">

Get Involved

</a>

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<li class="tier-2 element-13" role="treeitem">

<a href="/psf/community-stories/" title="">

Shared Stories

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<li class="tier-1 element-5">

<a href="/success-stories/" title="success-stories">

Success Stories

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<ul class="subnav menu">

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<a href="/success-stories/category/arts/" title="">

Arts

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Business

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<li class="tier-2 element-3" role="treeitem">

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Education

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Engineering

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Government

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Scientific

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Software Development

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<a href="/blogs/" title="News from around the Python world">

News

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<ul class="subnav menu">

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<a href="/blogs/" title="Python Insider Blog Posts">

Python News

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<li class="tier-2 element-2" role="treeitem">

<a href="/psf/newsletter/" title="Python Software Foundation Newsletter">

PSF Newsletter

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<li class="tier-2 element-3" role="treeitem">

<a href="http://pyfound.blogspot.com/" title="PSF Blog">

PSF News

</a>

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<li class="tier-2 element-4" role="treeitem">

<a href="http://pycon.blogspot.com/" title="PyCon Blog">

PyCon US News

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<li class="tier-2 element-5" role="treeitem">

<a href="http://planetpython.org/" title="Planet Python">

News from the Community

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<li class="tier-1 element-7">

<a href="/events/">

Events

</a>

<ul class="subnav menu">

<li class="tier-2 element-1" role="treeitem">

<a href="/events/python-events/" title="">

Python Events

</a>

</li>

<li class="tier-2 element-2" role="treeitem">

<a href="/events/python-user-group/" title="">

User Group Events

</a>

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<li class="tier-2 element-3" role="treeitem">

<a href="/events/python-events/past/" title="">

Python Events Archive

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<li class="tier-2 element-4" role="treeitem">

<a href="/events/python-user-group/past/" title="">

User Group Events Archive

</a>

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<li class="tier-2 element-5" role="treeitem">

<a href="https://wiki.python.org/moin/PythonEventsCalendar#Submitting\_an\_Event" title="">

Submit an Event

</a>

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<li class="tier-1 element-8">

<a href="/dev/">

Contributing

</a>

<ul class="subnav menu">

<li class="tier-2 element-1" role="treeitem">

<a href="https://devguide.python.org/" title="">

Developer's Guide

</a>

</li>

<li class="tier-2 element-2" role="treeitem">

<a href="https://github.com/python/cpython/issues" title="">

Issue Tracker

</a>

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<li class="tier-2 element-3" role="treeitem">

<a href="https://mail.python.org/mailman/listinfo/python-dev" title="">

python-dev list

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<li class="tier-2 element-4" role="treeitem">

<a href="/dev/core-mentorship/" title="">

Core Mentorship

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<li class="tier-2 element-5" role="treeitem">

<a href="/dev/security/" title="">

Report a Security Issue

</a>

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<a class="jump-link" href="#python-network" id="back-to-top-2">

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<span>

▲

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</span>

Back to Top

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<!-- end .main-footer-links -->

<div class="site-base">

<div class="container">

<ul class="footer-links navigation menu do-not-print" role="tree">

<li class="tier-1 element-1">

<a href="/about/help/">

Help &amp;

<span class="say-no-more">

General

</span>

Contact

</a>

</li>

<li class="tier-1 element-2">

<a href="/community/diversity/">

Diversity

<span class="say-no-more">

Initiatives

</span>

</a>

</li>

<li class="tier-1 element-3">

<a href="https://github.com/python/pythondotorg/issues">

Submit Website Bug

</a>

</li>

<li class="tier-1 element-4">

<a href="https://status.python.org/">

Status

<span class="python-status-indicator-default" id="python-status-indicator">

</span>

</a>

</li>

</ul>

<div class="copyright">

<p>

<small>

<span class="pre">

Copyright ©2001-2025.

</span>

<span class="pre">

<a href="/psf-landing/">

Python Software Foundation

</a>

</span>

<span class="pre">

<a href="/about/legal/">

Legal Statements

</a>

</span>

<span class="pre">

<a href="https://policies.python.org/python.org/Privacy-Notice/">

Privacy Notice

</a>

</span>

<!--&nbsp;<span class="pre"><a href="/psf/community-infrastructure">Powered by PSF Community Infrastructure</a></span>-->

</small>

</p>

</div>

</div>

<!-- end .container -->

</div>

<!-- end .site-base -->

</footer>

</div>

<!-- end #touchnav-wrapper -->

<script src="//ajax.googleapis.com/ajax/libs/jquery/1.8.2/jquery.min.js">

</script>

<script>

window.jQuery || document.write('<script src="/static/js/libs/jquery-1.8.2.min.js"><\/script>')

</script>

<script src="//ajax.googleapis.com/ajax/libs/jqueryui/1.12.1/jquery-ui.min.js">

</script>

<script>

window.jQuery || document.write('<script src="/static/js/libs/jquery-ui-1.12.1.min.js"><\/script>')

</script>

<script src="/static/js/libs/masonry.pkgd.min.js">

</script>

<script src="/static/js/libs/html-includes.js">

</script>

<script charset="utf-8" src="/static/js/main-min.ef82c06437cf.js" type="text/javascript">

</script>

<!--[if lte IE 7]>

<script type="text/javascript" src="/static/js/plugins/IE8-min.8af6e26c7a3b.js" charset="utf-8"></script>

<![endif]-->

<!--[if lte IE 8]>

<script type="text/javascript" src="/static/js/plugins/getComputedStyle-min.d41d8cd98f00.js" charset="utf-8"></script>

<![endif]-->

</body>

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