

```
# Python 3: Fibonacci series up to n
>>> def fib(n):
>>>     a, b = 0, 1
>>>     while a < n:
>>>         print(a, end=' ')
>>>         a, b = b, a+b
>>>     print()
>>> fib(1000)
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987
```

Functions Defined

The core of extensible programming is defining functions. Python allows mandatory and optional arguments, keyword arguments, and even arbitrary argument lists. [More about defining functions in Python 3](#)

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 Python.

[Start with our Beginner's Guide \(/about/gettingstarted/\).](#)

Download

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

Latest: [Python 3.8.3 \(/downloads/release/python-383/\)](#).

Docs

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

[docs.python.org \(https://docs.python.org\)](#)

Jobs

Looking for work or have a Python related position that you're trying to hire for? Our **relaunched community-run job board** is the place to go.

[jobs.python.org \(/jobs.python.org\)](#).

Latest News

2020-05-14 [Lightning Talks Part 2 - Python Language Summit 2020](#)
(<http://feedproxy.google.com/~r/PythonSoftwareFoundationNews/~3/5P9XTL57fNU/lightning-talks-part-2.html>)

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- 2020-05-14 [Python 3.8.3 is now available](http://feedproxy.google.com/~r/PythonInsider/~3/Ae5Lv6hpDyM/python-383-is-now-available.html) (<http://feedproxy.google.com/~r/PythonInsider/~3/Ae5Lv6hpDyM/python-383-is-now-available.html>),
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- 2020-05-13 [Call for Volunteers! Python GitHub Migration Work Group](http://feedproxy.google.com/~r/PythonSoftwareFoundationNews/~3/EnEH8gFi30/call-for-volunteers-python-github.html) (<http://feedproxy.google.com/~r/PythonSoftwareFoundationNews/~3/EnEH8gFi30/call-for-volunteers-python-github.html>),
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- 2020-05-13 [6 Ways Salesforce Gets Things Done with Python](http://feedproxy.google.com/~r/PythonSoftwareFoundationNews/~3/8w8A-ly_YZk/6-ways-salesforce-gets-things-done-with.html) (http://feedproxy.google.com/~r/PythonSoftwareFoundationNews/~3/8w8A-ly_YZk/6-ways-salesforce-gets-things-done-with.html),
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- 2020-05-13 [Capital One - Lessons From Adopting Python as a Team](http://feedproxy.google.com/~r/PythonSoftwareFoundationNews/~3/YWA1iXsooLA/capital-one-lessons-from-adopting.html) (<http://feedproxy.google.com/~r/PythonSoftwareFoundationNews/~3/YWA1iXsooLA/capital-one-lessons-from-adopting.html>),
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Upcoming Events

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- 2020-05-23 [Python fwdays'20](/events/python-events/970/) (</events/python-events/970/>),
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- 2020-06-05 [PyLondinium 2020 \(postponed\)](/events/python-events/948/) (</events/python-events/948/>),
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- 2020-06-05 [PyCon CZ 2020 \(canceled\)](/events/python-events/895/) (</events/python-events/895/>),
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- 2020-06-13 [PyCon Odessa 2020](/events/python-events/892/) (</events/python-events/892/>),
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- 2020-06-17 [Python Web Conference 2020 \(Online-Worldwide\)](/events/python-events/968/) (</events/python-events/968/>),
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Success Stories

Thanks to the flexibility of Python and the powerful ecosystem of packages, the Azure CLI supports features such as autocompletion (in shells that support it), persistent credentials, JMESPath result parsing, lazy initialization, network-less unit tests, and more. (</success-stories/building-an-open-source-and-cross-platform-azure-cli-with-python/>).

[Building an open-source and cross-platform Azure CLI with Python](/success-stories/building-an-open-source-and-cross-platform-azure-cli-with-python/) (</success-stories/building-an-open-source-and-cross-platform-azure-cli-with-python/>) by Dan Taylor

Use Python for...

Web Development:

[Django](http://www.djangoproject.com/) (<http://www.djangoproject.com/>), [Pyramid](http://www.pylonsproject.org/) (<http://www.pylonsproject.org/>), [Bottle](http://bottlepy.org/) (<http://bottlepy.org/>), [Tornado](http://tornadoweb.org/) (<http://tornadoweb.org/>), [Flask](http://flask.pocoo.org/) (<http://flask.pocoo.org/>), [web2py](http://www.web2py.com/) (<http://www.web2py.com/>).

GUI Development:

[tkInter](http://wiki.python.org/moin/TkInter) (<http://wiki.python.org/moin/TkInter>), [PyGObject](https://wiki.gnome.org/Projects/PyGObject) (<https://wiki.gnome.org/Projects/PyGObject>), [PyQt](http://www.riverbankcomputing.co.uk/software/pyqt/intro) (<http://www.riverbankcomputing.co.uk/software/pyqt/intro>), [PySide](https://wiki.qt.io/PySide) (<https://wiki.qt.io/PySide>), [Kivy](https://kivy.org/) (<https://kivy.org/>), [wxPython](http://www.wxpython.org/) (<http://www.wxpython.org/>).

Scientific and Numeric:

[SciPy](http://www.scipy.org/) (<http://www.scipy.org/>), [Pandas](http://pandas.pydata.org/) (<http://pandas.pydata.org/>), [IPython](http://ipython.org) (<http://ipython.org>).

Software Development:

[Buildbot](http://buildbot.net/) (<http://buildbot.net/>), [Trac](http://trac.edgewall.org/) (<http://trac.edgewall.org/>), [Roundup](http://roundup.sourceforge.net/) (<http://roundup.sourceforge.net/>).

System Administration:

[Ansible](http://www.ansible.com/) (<http://www.ansible.com/>), [Salt](http://www.saltstack.com/) (<http://www.saltstack.com/>), [OpenStack](https://www.openstack.org) (<https://www.openstack.org>).

[Python Enhancement Proposals \(PEPs\)](/dev/peps/) (/dev/peps/): The future of Python is discussed here.


 [RSS](/dev/peps/peps.rss) (/dev/peps/peps.rss).


[Python Software Foundation](/psf/) (/psf/).

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. >>> [Learn more](/psf/) (/psf/).

[Become a Member](/users/membership/) (/users/membership/).

[Donate to the PSF](/psf/donations/) (/psf/donations/).

 [Back to Top](#)

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