

What is Python? The popular, scalable programming language

Python is a programming language known for its far-reaching applicability that goes beyond web development coding.

Python can be a good coding language for new or novice coders because of its readability and use of the English language.

Although it's an accessible program to learn and use, Python can be scaled up and implemented for vast, complex tasks, including compiling massive amounts of data and executing machine learning algorithms.

What is Python?

Python is a multipurpose programming language, and it has applicability pretty much anywhere that uses data, mathematical computation, or lines of code. That means unlike Java, for instance, Python isn't confined to being used for web development.

How Python is used

For anyone from corporate software engineers to casual coders, Python is a viable, accessible programming language.

Python can be used for small tasks, like executing extremely complex code, like analyzing massive amounts of financial data or e-commerce data.

Here's a sliver of the different ways Python goes beyond a basic web development tool:

- **Data science** : This field makes up a sizable user base of Python for both its computing and compiling of data libraries.
- **Machine learning**: Python's code can implement machine learning, which helps refine algorithm-based tech from voice recognition to content recommendation and many more!
- **Data mining**: Python's nimbleness and scalability also makes it an attractive program to process and mine big data, which has seen a lot of mileage in the finance sector, health, transport, e commerce etc

Advantages of Python

There are drawbacks to Python - for instance, its computing is often slower due to its line-by-line execution style. However, its advantages make it an attractive coding choice.

Here are a few of the big advantages of Python:

- **Popularity and access:** Python has a huge community to support it, which helps maintain its accessibility to any skill level - it's also free and open-source software.
- **Simple syntax:** The Python coding language has an easy-to-learn syntax and uses English words.
- **Readability:** Lines of code written in Python are also easy to read. For instance, Python uses a nice, clean break in the form of a new line of code to complete a command, rather than semicolons or parentheses.
- **Scalability:** You can start a program in Python without having to worry about the arduous task of rewriting or adapting code for other platforms as you scale up.

<https://www.python.org/doc/essays/blurb/>

Tools for development:

For python to run Python must be installed on the computer, get latest python from <https://www.python.org/>

Also need for an Integrated Development Environment - IDE , below are examples you can install

VS Code

<https://code.visualstudio.com/>

PyCharm - Community Edition

<https://www.jetbrains.com/pycharm/download/#section=linux>

Also python can be run from online interpreter, like you can get started from Repl with your first python program online here <https://replit.com/languages/python3>

Read more on python

[https://en.wikipedia.org/wiki/Python_\(programming_language\)](https://en.wikipedia.org/wiki/Python_(programming_language))