**Python** is a high-level, general-purpose programming language. Its design philosophy emphasizes code readability with the use of significant indentation.

Python is dynamically typed and garbage-collected. It supports multiple programming paradigms, including structured (particularly procedural), object-oriented and functional programming. It is often described as a "batteries included" language due to its comprehensive standard library.

Guido van Rossum began working on Python in the late 1980s as a successor to the ABC programming language and first released it in 1991 as Python 0.9.0. Python 2.0 was released in 2000 and introduced new features such as list comprehensions, cycle-detecting garbage collection, reference counting, and Unicode support. Python 3.0, released in 2008, was a major revision not completely backward-compatible with earlier versions. Python 2.7.18, released in 2020, was the last release of Python 2.

Python consistently ranks as one of the most popular programming languages.

Python is meant to be an easily readable language. Its formatting is visually uncluttered and often uses English keywords where other languages use punctuation. Unlike many other languages, it does not use [curly brackets](https://en.wikipedia.org/wiki/Curly_bracket_programming_language) to delimit blocks, and semicolons after statements are allowed but rarely used. It has fewer syntactic exceptions and special cases than [C](https://en.wikipedia.org/wiki/C_(programming_language)) or [Pascal](https://en.wikipedia.org/wiki/Pascal_(programming_language)).

### Expressions

Python's [expressions](https://en.wikipedia.org/wiki/Expression_(computer_science)) include:

* The +, -, and \* operators for mathematical addition, subtraction, and multiplication are similar to other languages, but the behavior of division differs. There are two types of divisions in Python: [floor division](https://en.wikipedia.org/wiki/Floor_division) (or integer division) // and floating-point/division.[[91]](https://en.wikipedia.org/wiki/Python_(programming_language)#cite_note-91) Python uses the \*\* operator for exponentiation.
* Python uses the + operator for string concatenation. Python uses the \* operator for duplicating a string a specified number of times.
* The @ infix operator. It is intended to be used by libraries such as [NumPy](https://en.wikipedia.org/wiki/NumPy) for [matrix multiplication](https://en.wikipedia.org/wiki/Matrix_multiplication).[[92]](https://en.wikipedia.org/wiki/Python_(programming_language)#cite_note-PEP465-92)[[93]](https://en.wikipedia.org/wiki/Python_(programming_language)#cite_note-Python3.5Changelog-93)
* The syntax :=, called the "walrus operator", was introduced in Python 3.8. It assigns values to variables as part of a larger expression.[[94]](https://en.wikipedia.org/wiki/Python_(programming_language)#cite_note-Python3.8Changelog-94)
* In Python, == compares by value. Python's is operator may be used to compare object identities (comparison by reference), and comparisons may be chained—for example, a <= b <= c.
* Python uses and, or, and not as boolean operators.