Python is an <u>interpreted</u>, <u>high-level</u> and <u>general-purpose programming language</u>. Python's design philosophy emphasizes <u>code readability</u> with its notable use of <u>significant whitespace</u>. Its <u>language constructs</u> and <u>object-oriented</u> approach aim to help <u>programmers</u> write clear, logical code for small and large-scale projects. [28]

Python is <u>dynamically typed</u> and <u>garbage-collected</u>. It supports multiple <u>programming</u> <u>paradigms</u>, including <u>structured</u> (particularly, <u>procedural</u>), <u>object-oriented</u>, and <u>functional programming</u>. Python is often described as a "batteries included" language due to its comprehensive standard library.[29]

Python was created in the late 1980s, and first released in 1991, by <u>Guido van Rossum</u> as a successor to the <u>ABC programming language</u>. Python 2.0, released in 2000, introduced new features, such as <u>list comprehensions</u>, and a garbage collection system with <u>reference counting</u>, and was discontinued with version 2.7 in 2020.[30] Python 3.0, released in 2008, was a major revision of the language that is not completely <u>backward-compatible</u> and much Python 2 code does not run unmodified on Python 3.

Python <u>interpreters</u> are available for many <u>operating systems</u>. A global community of programmers develops and maintains <u>CPython</u>, a <u>free and open-source[31] reference implementation</u>. A non-profit organization, the <u>Python Software Foundation</u>, manages and directs resources for Python and CPython development. It currently ties with <u>Java</u> as the second most popular programming language in the world.