

What are pros & cons of python?

### pros

#### 1. Simplicity & readability

Has a syntax that is similar to english, making it easier to learn, write & read.

#### 2. Huge libraries & packages.

pandas for data analysis

django for webdevelopment.

#### 3. Versatility.

can be used for wide range of appls including web-development, DS, ML, scripting, etc.

#### 4. Portability

Python code can run on dif platforms (windows, macos, linux)

### cons

#### 1. slower execution speed.

since it is an interpreted language python runs slower than compiled language.

#### 2. High memory usage.

python consumes more memory compared to other languages due to its dynamic typing

3. Not ideal for mobile app developments.  
due to performance & memory limitations.

4. Runtime error possible

## History of Python

### 1. Origins & creator

- python was created by Guido van Rossum, a Dutch programmer.
- He started developing it in December 1989 at CWI
- He named it after the British Comedy television show 'Monty Python's Flying Circus'.
- python 0.9.0 (February 1991) — the first public release featuring basic data types & object-oriented capabilities.
- python 1.0 (January 1994) — the official first major release including features like lambda, map, reduce & filter.
- python 2.0 (<sup>October</sup> ~~December~~ 2000) — introduced features like garbage collection & unicode support
- python 3.0 (December 2008) — designed to address inconsistencies & it introduced new syntax, enhanced unicode support.
- Recent development — python continues to evolve under the PSF (Python Software Foundation)