

29/10/2025

1.) what are the pros and cons of python?

→ Pros of python:

Python is easy to learn, read and write bcz of its simple & clean syntax. It offers a large standard library & many third-party modules that support various domains like AI, Machine learning, & web development. Being cross-platform & open-source, it can run on multiple operating systems without modification. Python also has strong community support, frequent updates, & helps increase developer productivity by requiring fewer lines of code.

Cons of python:

Python's execution speed is slower compared to compiled languages like C++ or Java. It consumes more memory, making it less suitable for resource

limited system's. It's generally not preferred for mobile app or game development. Additionally, since Python is dynamically typed, errors can occur at runtime if variables are not handled properly.

2.) History of Python?

→ Python was created by Guido van Rossum in the late 1980s at CWI (Centrum Wiskunde & Informatica) in the Netherlands & was officially released in 1991. The language was named after the British comedy show "Monty Python's Flying Circus". Guido aimed to design a language that was simple, readable & powerful, focusing on code clarity & productivity. Python 1.0 (1994) introduced core features like data types & functions, Python 2.0 (2000) added garbage collection & unicode support, & Python 3.0 (2008) modernized the language with major improvements.

Python has three main implementations:

- CPython → The default & most widely used implementation of Python, written in C used to execute Python code efficiently.
- Jython → A version of Python that runs on the Java platform, allowing seamless integration with Java libraries.
- IronPython → An implementation for the .NET framework, enabling interaction with .NET languages like C# and VB.