

Ques. What is Python?

- Python is a high-level, interpreted, general-purpose programming language.
- Python is an **interpreter** language. It means it executes the code line by line
- It was created by **Guido van Rossum**, and released in **1991**
- It is used for:
 - web development (server-side)
 - software development
 - mathematics
 - system scripting

Ques. Features of Python?

1. **Easy:-** Python is very easy to learn and understand; using this Python tutorial, any beginner can understand the basics of Python.
2. **Interpreted:-** It is interpreted(executed) line by line. This makes it easy to test and debug.
3. **Object-Oriented:-** The Python programming language supports classes and objects. We discussed these above.
4. **Free and Open Source:-** The language and its source code are available to the public for free; there is no need to buy a costly license.
5. **Portable:-** Since it is open-source, you can run Python on Windows, Mac, Linux or any other platform. Your programs will work without needing to be changed for every machine.
6. **GUI Programming:-** You can use it to develop a GUI (Graphical User Interface). One way to do this is through Tkinter.
7. **Large Library:-** Python provides you with a large standard library. You can use it to implement a variety of functions without needing to reinvent the wheel every time. Just pick the code you need and continue. This lets you focus on other important tasks.

Ques. Python Frameworks?

- **Web Development:** Django, Pyramid, Bottle, Tornado, Flask, web2py
- **GUI Development:** tkinter, PyGObject, PyQt, PySide, Kivy, wxPython
- **Scientific and Numeric:** SciPy, Pandas, IPython
- **Software Development:** Buildbot, Trac, Roundup
- **System Administration:** Ansible, Salt, OpenStack, xonsh

1. NumPy
2. Pylons