

History of python:

Python programming language foundation stone has laid in the year 1980.

Python language started on in the year of 1989.

It is officially released in the year of 1991 february.

It is developed by "Guido van rossum".

It is developed CWI(centrum wiskende information in netherlands)

It is maintained by non-commercial organization python SW foundation (PSF).

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Version of python:

Python programming contains 3-types of versions.

- a) Python 1.x
- b) Python 2.x Here X represents 1.2,1.3,1.4
- c) Python 3.x does not contain backward compatability with python 2.x

Python Version 3.12.2

3 - Major Version

12 - Minor Version

2 - Alpha Version(Patch)

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Python program inspired from:

- a) Fundamental programming from c
- b) OOps from c++
- c) Scripting program from PERL

d) Modular program from modulo

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Features of python:

Features of a language are nothing but services / facilities providing by python developers and those features used by real time programmers for dev real-time apps.

- a) Simple
- b) Freeware & opensource
- c) Platform independent
- d) Dynamically typed
- e) Interpreted
- f) High - level
- g) Extensible
- h) Embedded
- i) Both function and oops
- j) Robust (strong)
- k) Extensive support for third party API's(Numpy, Pandas, Scipy)

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Real time application developed by using python:

By using python program language and some combined technologies, to develop real time application.

- 1) To Develop Web application.
- 2) To Develop Gaming application.
- 3) To Develop Artificial Intelligence.

- 4) To Develop Image Processing application.
- 5) To Develop Video & Audio application.
- 6) To Develop Web-scrapping / Web-harvesting.
- 7) To Develop Business application.
- 8) To Develop Scientific application.
- 9) To Develop OS installer
- 10) To Development of language(Spark,Scale)
- 11) To Develop GUI application(ATM, Dmart-biling).
- 12) To Develop data analysis / analytics.
- 13) To Develop automation of testing(selenium).
- 14) To Develop complex math operations.
- 15) To Develop of console based applications(NON-GUI).
- 16) To Develop of animations.
- 17) To Develop CAD & CAM based applications.
- 18) Development of computer vision.(QR-CODE and Bar-code)
- 19) To Development of IOT.
- 20) To Develop enterprise applications.

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Types of Errors:

1) Compile time Error

2) Logical Error

3) Runtime Error

4) Type Error

5) Index Error

6) Value Error

7) Name Error

8) Key Error

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