

PYTHON

A. Introduction :

- Python is a general purpose high level programming language having support of Object Oriented Programming. It is user friendly and also a interpreted language which convert user code to computer readable format.
- It is firstly introduced by Guido van Rossum on 1989, which got its patient on 1990 and officially released on 1991.

B. Features :

- I. **OOP (Object Oriented Programming):** It supports OOPs concept that's why it is considered as a high level language.
- II. **Portable:** Its Code can run on any machine having Windows, Mac and Linux Operating System.
- III. **Extensible:** Any code like HTML, CSS, JavaScript and many different code can run inside the Python.
- IV. **Dynamicity:** Python has lacks of libraries which makes to code easy and achieve complex task efficiently.
- V. **Low Level Language:** We can write Machine instructions (Machine language), Assembly Language and program for computer hardware components.

C. Application :

- I. We can created Control based application.
- II. Graphical User Interface (GUI) application can be created by python.
- III. To create Web based application Python has libraries such as Flask, Django Flutter etc.
- IV. By Python we can do Data Science, Artificial Intelligence, NLP, Internet of Things and Robotics and many more things very efficiently without complex programming.
- V. Programing for Operating System (OS) can also be done by using Python.
- VI. Server Side Scripting for web application and android based application can also be done.
- VII. It is also widely used in Network Programing