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Python

* Python is a general purpose interpreted, interactive object oriented and high level programming language.

* It was created by Guido van Rossum during 1985 to 1990. Like ~~perl~~ ^{Perl}, python source is open source ~~is~~ under the GNU under general public license.

⇒ Features:-

1) Python is interpreted:- It is python processed at runtime, you do not need to compile the program before executing which is similar to perl & PHP.

You can actually sit ~~at~~ ^{at} a python prompt & interact with interpreter directly.

2) Python is object oriented:- It support obj oriented style or technique of programming that encapsulates code

3) Python is a beginner's level:- It is a great language for beginner level programming.

and supports the development of a wide range of applications. From simple text processing to games.

4) i) It supports Functional & structural programming methods as well as OOP.

ii) It can be used as a scripting language or can be compiled to byte code for building large applications.

iii) It provides very high level dynamic data types and supports basic type checking.

iv) It supports automatic garbage collection.

v) It is easily integrated C, C++, COM, Active X, CORBA, Java

⇒ Apply Applications of python:-

1) Easy to learn → Few keywords, simple structure & clearly defined syntax, this allows students to pick up the language quickly.

2) Easy to read → Python code is more clearly defined & visible to eyes.

3) Easy to maintain → Python's source code is

easy to maintain.

4) A broad standard library - Its bulk of library is very portable & has cross platform compatibility in Linux, Unix, MacOS, windows.

5) Interactive mode :- It has support of interactive mode which allows testing & debugging of code.

6) Portable :- Python can run on a wide variety of hardware platforms and has the same interface on all platforms.

7) Extensible :- You can add low level modules to the python interpreter. These modules enable programmers to add tools or customize their tools to

8) Databases :- Python provides interfaces to all major commercial databases.

9) Scalable :- Python provides a better structure and support for large programs than shell scripting.

10) GUI Programming :- Python supports GUI applications that can be created and ported to many systems calls, libraries & windows system such as ~~as~~ windows, MFC, MAC, and X windows system at linux.