

1. What are the data types in Python?

Explain

Ans Data types are the classification / categorization of data items. Data types represent a kind of value which determine what operations can be performed on data.

Types :-

- i) Number - This includes integer, float & complex
- ii) String - A string object is one of the sequence data type in Python. It is an immutable sequence of unicode characters.
- iii) List - The list is a collection of items of different data types. It is an ordered sequence of operations.
- iv) Tuple - Tuple is a collection of items of any Python data type same as list but a tuple is immutable.
- v) Dictionary - Like a list & tuple, dictionary is a collection type but it contains key-value pairs.

2. Briefly explain history of Python.

Ans Python was developed by Guido van Rossum (Thank you sir for developing Python) at Centrum Wiskunde & Informatica in the Netherlands as a successor to the ABC language

3. Explain all operators in Python.

Ans

i) Arithmetic operator:

+, -, /, %, **, //, *

ii) Relational operator:

<, >, <=, >=, ==, !=

iii) Assignment operator:

=, +=, -=, /=, *=, %=,
**=, //=

iv) Logical operator:

and, or, not

v) Bitwise operator:

~, |, ^, ~, <<, >>

Q. Explain the features of python

~~Ans~~

- i) Easy to code :- It is a developer friendly language
- ii) Free & open source
- iii) Object-Oriented programming :- Python supports classes, objects etc.
- iv) GUI programming support
- v) High-level language :- No need to manage memory
- vi) It is portable language :- The code once compiled can be executed on any platform without changing the code.
- vii) Large Standard library
- viii) Dynamically Typed language :-

That means the type of variable is decided during runtime & not in advance.

5. Justify why python is interactive & interpreted language.

Ans Python is interpreted, means each time the program is run, the interpreter checks for error & interprets the instruction to machine readable bytecode.

Python is interactive, means when a python statement is entered & followed by a return key, if apt the result will be printed on the next line. This is advantageous for debugging processes.