

Python.

2. Briefly explain history about Python.

- * Python is an interpreted, high-level general-purpose programming language
- * Created by Guido van Rossum
- * First released in 1991, Python's design philosophy emphasizes code readability
- * Its language designer dynamic programming language.

First appeared : 1990: 30 years ago.

- * Python is a snake name
- * It supports the app language.

1. What the data type in Python? Explain
Data type are the classification or categorization of data items.

- * Numeric
- * Non-Numeric
- * Boolean data are the most used data types

Numeric:

A numeric value is any representation of data which has a numeric value

- * Integer: +ve or -ve values
- * Float: real numbers

Complex Number:
A num with a real & imagin-
-ary component represent as $x+iy$,

Boolean: Data with one of two built in values

Sequence type: A Sequence is an ordered
collection of similar & different data type

Dictionary:

A dictionary object is an unordered
collection of data in a key: value
{1: "Steven", 2: "Bill", 3: "Ram",
4: "Rahul"}

* type() function

3. Explain all the operators in python!

1. Arithmetic operations:

$+$ $\rightarrow x+y$

$*$ $\rightarrow x*y$

$//$ $\rightarrow x//y$

$**$ $\rightarrow x**y$

$-$ $\rightarrow x-y$

$/$ $\rightarrow x/y$

$-.$ $\rightarrow x-.y$

This are used to perform mathematical
operation.

2. Logical operations

There perform logical AND, logical OR or logical NOT operations

- \Rightarrow and $\rightarrow x \text{ and } y$
- \Rightarrow or $\rightarrow x \text{ or } y$
- \Rightarrow not $\rightarrow \text{not } x$

3. Relatio operations

These will compare the value
 \therefore either return True or False

$> \rightarrow x > y$ $= \rightarrow x = y$

$! \rightarrow x ! y$

$> = \rightarrow x > = y$

4. Integrated It is an integrated language because we can easily integrate other language like C++, etc

5. Interpreted language:

Python is an interpreted language because python code is executed line by line at a time

⑤ Justify

4. explain the feature of python

1. Easy to learn & use

Python is easy to learn & use

1. It is developed - friendly w high level programming language

2. Supervise language.

It means that is more understandable as readable

3. Interpreted language

Interpreter executes the code line by line at a time.

4. Cross-platform language

It can run equally on different platforms such as run equally on different platform windows, linux, unix etc

5. Integrated

It can be easily integrated with language like C, C++, Java etc.

6. GUI programming Support

Graphical user interfaces can be developed using python.

5. Justify why python is interactive interpreted language?

⇒ unlike C/C++ etc, python is an interpreted oops. language.

unlike C language, which is a compiled programming language.

The compiler translates the whole code in one go rather than in a language all the errors are listed during compilation only.

An interpreter is a translator is compiler language.

⇒ Python is a Interactive, when a python is entered and followed by the Return key. The result will be printed on the screen, immediately in the next link.