

Assignment - 2

1) what is the data type in python ? Explain
A) Variables can store data of different types, and different types can do different things

Python has the following data type built-in by these categories

Text type: string

Numeric type: int, float, complex

Sequence type: list, tuple, range

Boolean type: bool

Mapping type: dict

Set type: set, frozenset

Binary type: bytes, bytearray, memoryview

2) Briefly explain history of python?

python is an interpreted, high-level, general-purpose programming language. Created by Guido van Rossum and first released in 1991, python's design philosophy emphasizes code readability with its notable use of significant whitespace. Its language constructs and object-oriented approach aim to help programmers with clear, logical code for small and large-scale projects.

3) Explain the operator in python?

Operators in python are

- * Arithmetic operator
- * Relational operator
- * Assignment operator
- * Logical operator
- * Identify operator
- * Bitwise operator

1) Arithmetic operator:-

Arithmetic operators are addition, subtraction, multiplication, division, modulus, exponentiation

2) Relational operator:- $<$, $>$, $<=$, $>=$, $==$, $!=$

3) Assignment operators:- $=$, $+=$, $-=$, $/=$, $*=$

4) logical operator :- and, or, not

5) membership operator :- in, not in

6) Identify operator :- are, is, not is

4) Explain features of python?

- 1) Easy to code
- 2) free and open source
- 3) object oriented language
- 4) portable
- 5) GUI programming support
- 6) High - low language
- 7) Integrated language
- 8) Dynamically type language

5) Justify why python is interactive interpreted language?

A) Unlike c/c++ etc, python is a interpreted object-oriented programming language. The compiler translates the whole code in one-go, rather than line by line this is the reason why in c language, all the errors are listed during compilation only.