

Assignment - 2

Python

1) What are the datatypes in python? Explain.

* integer (int)

float (or Real)

string (or str or text)

Boolean (or bool)

character (or char)

2) Briefly explain history of python?

* python was conceived in the late 1980s by Guido van Rossum at centrum wiskunde and informatica (CWI) in the Netherlands as a successor to the ABC language (itself inspired and interfacing with the ameba operating system). Its implementation began in December 1989.

Language designers : Guido van Rossum

Language paradigms : interpreted language,
dynamic programming language

Software : (python, psyco, Nuitka, sage math,
ubuntu, Gentoo, Linux.

3) Explain all the operators in python.

* Arithmetic operators.

(Addition, subtraction, multiplication, division,
modules, Floor division, Exponent)

comparison operators.

(Greater than $>$, Less than $<$, Equal to $=$,
Not equal \neq , Greater than equal to \geq ,
Less than \leq)

Logical operator

(and, or, not) ($\&$, $|$, \sim)

Bitwise operators

($\&$ AND, $|$ OR, \sim NOT, \wedge XOR, $>>$ right shift,
 $<<$ left shift)

Assignment operator.

($=$, $+=$, $-=$, $*=$, $/=$, $\%=$, $//=$, $**=$, $\&=$, $|=$,
 $\wedge=$, $>>=$, $<<=$)

Special operator.

(is, is not)

membership operator.

(in, not in)

4) Explain the features of python

1) Easy to learn and use. python is easy to learn and use.

2) Expressive language

3) Interpreted Language

4) Cross-platform Language

- 5) Free and open source
- 6) object oriented Language
- 7) extensible
- 8) Large standard Library.

9) Justify why python is interactive interpreted

* python is interactive when a python statement is entered and is followed by the Return key, if appropriate, the result will be printed on the screen. immediately in the next time this is particularly advantageous in the debugging process in interactive mode of operation, python is used in a similar way as the unix command line or the terminal.