

Date
19/06/2020

Assignment - 2

Day
Friday

Python.

1) What the data types 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 by SETL) capable of exception handling and interfacing with the Amoeba operating system. Its implementation began in December 1989.

Language designers: Guido van Rossum

Language paradigms: interpreted language,
Dynamic programming
language.

Software: CPython, Psyco, Nuitka, Sage
math, Ubuntu, Gentoo Linux.

3) Explain all the operators in python.

Arithmetic operators

(Addition, subtraction, Multiplication, Division, modulus, Floor division, Exponent)

Comparison operators

(Greater than $>$, Less than $<$, Equal to $==$, Not equal $!=$, Greater than equal to $>=$, Less than $<=$)

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.

5) Justify why Python is interactive interpreted language.

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 line.

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.