

Assignment - 2

① What are the data types in python? Explain

① Integer :- positive (or) negative whole number are the integer datatypes in python.

float :- Any real number with floating points represent in which a fractional component is denoted by a decimal symbol or scientific notation.

Complex number :- A num with real a real and imaginary components represents as $x+yi$; x and y are floats and $i = \sqrt{-1}$

Boolean :- Data with one of two built in values true or false. are not valid boolean and python will throw an error for them.

String :- A string value is a collection of one (or) more characters put in a single double or triple quotes.

List :- A list object is an ordered one or more data items, not necessary of

The same type, put in square brackets.

Tuple: A tuple object is an ordered collection of one or more data items. not necessary of the same types, put in brackets.

② Briefly explain the history of python?

① python was created by Guido van Rossum in 1980 to 1990. He was a member of the natural Research of institute of mathematics and computer science, initially it was designed as a response to the ABC programming language was that python has extention. The name python is from the British TV show Monty Python. In addition to exception handling involved classes.

③ Explain the operators of operation.

① operations of python are:
Arithmetic operator
Relational operator
Assignment operator
Logical operator
membership operator
Identity operator
Bitwise operator

→ Arithmetic operators are $+$, $-$, $*$, $/$,
modules, Exponentiation

→ Relational operators $<$, $>$, $<=$, $>=$, $=$, $==$ →

→ Assignment operators $=$, $+=$, $-=$, $/=$, $*=$, $%=$,
 $**=$, $//=$.

→ Logical operators and, or, not.

→ Member operators in, not in

→ Identity operator is, is not

→ Bitwise operator Binary and (&) Binary (or) Binary (xor) Binary (left shift) Binary (right shift)

Binary (xor) (A) \wedge , $<<$, $>>$

④ Explain features of python?

→ Easy to code

→ free and open source

→ object oriented language

→ GUI programming support

→ High level language

→ Extensible features

→ portable language

→ Integrated language

→ large standard library

⑤ Justify why python is interpreted language?

① Unlike C/C++ etc, python is an interpreted object oriented programming language. The compiler which is compiled programming language. The compiler translates the whole code in one rather than C language all the errors are listed during compilation only.