

## Assignment - 2

① What the data-types in Python? Explain.

sol) Python has the following data-types built in by default, in these categories:

Text type : Str.

Numeric type : int, float, Complex

Sequence type : range, list, tuple.

Mapping type : dict

Set type : Set, frozen Set

Boolean Type : bool

Binary datatypes : bytes, bytearray, memory view

Standard data-types:

A variable can hold different types of values, Python provides various standard data types that define the storage method on each of them. The data-types defined in Python are given below

① Number ② String ③ list ④ tuple ⑤ dictionary.

2) Briefly Explain history of Python.

sol) Python was conceived in the late 1980's by Guido van Rossum of Centrum wiskunde & informatica (CWI) in the Netherlands as a successor to the ABC language. (itself inspired by SETL), Capable of exception handling and interacting with the Amoeba operating system. Its implementation began in December 1989.

⇒ Python is a widely used general-purpose, high-level programming language.

⇒ It was mainly developed for emphasis on code readability and its syntax allows programmers to express concepts in fewer lines of code.

3) Explain all the operators in Python.

sol) Operators in Python are used to perform certain operations; they follow as

⇒ Arithmetic operators :- +, -, \*, /, %, \*\*

⇒ Relational operators :- <, >, <=, >=, ==

⇒ Assignment operators :- +=, -=, /=, \*=, //=

⇒ Logical operators :- and, or, not

⇒ Identity operators :- is, is not

=> member operator :- in, not in.

=> Bitwise operator :- Binary and, Binary or, Binary xor, <<, >>

4) Explain the features of Python?

Ans)

=> Easy to code

=> object oriented language

=> GOI Programming language

=> free and open source

=> high level language.

=> Portable language.

=> Integrated language.

=> large Standard library.

5) Justify why Python is interpreted language?

As unlike C, C++ etc, Python is an interpreted language, object oriented, The Compiler which is Compiled Programming language, The Compiler translates the whole code in one rather than C language all errors are listed during compilation.