

## Assignment :-

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Section: B<sub>1</sub>

1) What the data types in python? Explain.

- (i) Number: Number data types store numeric values number objects are created when you assign a value to them.
- (ii) Strings: Strings in python are identified as a contiguous set of character represented in the quotation marks python allows either pair of single & double quotes
- (iii) Lists: Lists are the most versatile of python compound data types. A list contains items compounds separated by commas and enclosed within square brackets.
- (iv) Tuples: A tuple is another sequence data type that is similar to the list. A tuple consists of a number of values separated by commas. Unlike lists, however, tuples are enclosed with parenthesis.
- (v) Dictionary: python's dictionaries are kind of hash-table type. they work like associative arrays or hashes. found in perl and consist of key value pairs. A dictionary key can be almost any python type, but are usually number or strings-values, on the other hand can be any arbitrary python object. Dictionaries are enclosed within only braces.

2) Briefly Explain history of python?

→ python is a general-purpose interpreted interactive, object-oriented, and high-level programming language.

→ It was created by "Guido van Rossum" during 1985-1990

→ Python is named after a TV show called 'monty python's Flying Circus' and not after python the snake.

3) Explain all operators in python?

→ When more than one operator appears in an expression the order of evaluation depends on the rules of precedence. PEMDAS order of operation is followed in python.

→ parentheses have the highest precedence and can be used to force an expression to evaluate in order you want.

→ 'Exponentiation' has the next highest precedence.

→ Multiplication and division have the same precedence which is higher than.

→ "Addition & subtraction" which also have the same precedence.

→ operators with same precedence are evaluated from left to right.

1) Explain Features of Python.

→ Features of Python

→ Simple

→ Easy to learn

→ Free and open Source

→ High level language

→ Python is Beginner's language

→ portable / platform independent

→ Interactive

→ Interpreted

→ object oriented

→ Extensible

→ Embeddable

→ Extensive Libraries.

5) Justify <sup>Why</sup> Python is interactive interpreted language

→ python is interactive

you can actually sit at a python prompt and interact with interpreter directly to write your programs

python is object-oriented. python supports object oriented style or technique of programming that encapsulates code with object.

→ python is interpreted

unlike c++ etc, python is interpreted object oriented programming language. By interpreted it is meant that which each time a program is run the interpreter checks through code errors.