1. What the data types in python? Explain

1. Number: Number data types store numeric values. Number objects are created when you assign a value to them.

2. Strings: Strings in python are identified as a contiguous set of characters represented in the quotation marks. Python allows either pair of single or double quotes.

3. Lists: Lists are the most versatile of Python's compound data types. A list contains items separated by commas and enclosed within square brackets ([]).

4. 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.

5. Dictionary: Python's dictionaries are kind of hash-table type. They work like associative arrays or hashes found in Pal and consist of 'Key values pairs. A dictionary Key can be almost any Python type, but are usually numbers & strings. Values, on the other hand, can be any arbitary python object. Dictionaries are enclosed within curly 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 the (Operations) 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 the order you want.

→ 'Exponentiation' has the next highest precedence.

→ 'Multiplication and Division' have the same precedence, which is higher than.

→ 'Addition and Subtraction', which also have the same precedence.

→ 'Operators with the same precedence' are evaluated from left to right.

4.) Explain the features of Python.

Features of Python

→ Simple
→ Easy to Learn
→ Free and open source
→ High-level language
→ Python is a Beginner's Language
→ Portable (Platform Independent)
→ Interactive
→ Interpreted
→ Object Oriented
→ Extensible
→ Embeddable
→ Extensive Libraries.

5.) Justify why Python is interactive interpreted language

Python is Interactive:
You can actually sit at a Python prompt and interact with the interpreter directly to write your programs.

Python is object-oriented - Python supports Object-Oriented style or technique of programming that encapsulates code within objects.

Python is Interpreted:
Unlike c/c++ etc, Python is an interpreted object-oriented programming language.
By interpreted it is meant that each time a program is run the interpreter checks through the code for errors and then interprets the instructions into machine-readable bytecode.