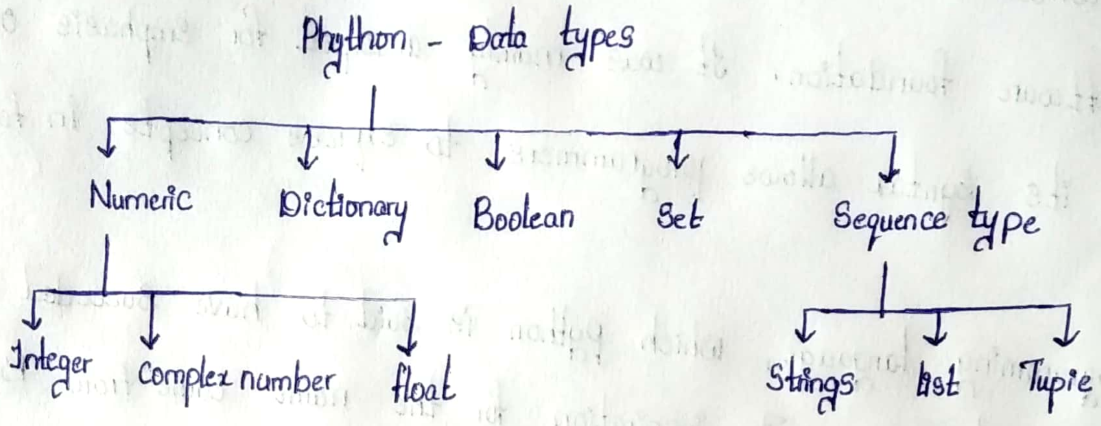
PYTHON ASSIGNMENT-2

1. What are the different types in python ? Explain ?



Data type represents a kind of value which determines what operations can be performed on that Data.

Numeric :- It is any representation of data which has a Numeric Value.

Integer :- positive (or) Negative whole numbers.

float :- Any real Number with a floating point representation in which a fractional component is denoted by a decimal symbol (or) scientific notation.

Complex Number :- A Number with a real and imaginary component represented as x+ij, x and Y are floats and j is -1 (square root of -1 called an imaginary Nomber

Boolean :- It has two built in Values true (or) False.

T & F are capital.

Sequence type :- It is an Ordered collection at similar (or) different data types.

string :- It is a collection at one (or) more characters put in Single, double (or) triple Quotes.

list :- It is an order collection at one (or) more data items put in Square brackets.

Dictionary :- It is an unordered collection of data in a key : Value pair form. A collection of such pairs is Enclosed in curly braces.

2. Briefly Explain History of python?

Python was conceived in the late 1980's By Guido Van Rossum and devolped by Python Software foundation. It was mainly devolped for Emphasis on code readability and its Syntax allows programmers to express concepts in fewer lines of code.

The Programming language, which Python is Said to have Succeded in ABc Programming language. The inspiration for the name came from BBc's "Manty Python's flying Circus".

The language was finally released in 1991. It uses a lot fewer codes to Express the concepts. when we compare it with Java, C++ & C, It's design Phylosophy was too good.

The main objective is to provide code readability and advanced devolped Productivity.

3) Explain all the operators in phython?

Arthimetic operators

Operators	Description	Syntax
+	Addition, Adds two operands	x+y
-	Subtracts two operands	x-y
x	Multiplies two operands	xy
/	float, Divides the first operand by second	x/y
//	floor, divides the first operand by second	x//y
%	Modules, returns remainder	x%y

Relational Operators

>	Greater than	x>y
==	Equal to	x==y
!	Not Equal	x!=y
>=	Greater than Equal	x>=y

logical Operator

and	True if both the operands are true	x and y
or	True if either of the operands are true	x or y
not	True if operand is false	Not x

Bitwise operators

&	Bitwise AND	x&y
|	Bitwise OR	x|y
~	Bitwise NOT	x~y
^	Bitwise XOR	x^y
>>	Bitwise Right shift	x>7

Assignment operators :-

=	Assigning the values from right to left	x = a+b

+=	left side operand and then assign to left	a+=b
		a=a+b

-=	Subtract a-b and assign to a	a-=b
		a=a-b

/=	Divide a/b & assign to a	a/=b a=a/b

= Modulus at a%b and assign to a   a%=b
a=a%b

ʃ = Perform aʃb and assign to a   aʃ=b
a=aʃb

>> = Right sight   a>>=b
a=a>>b

4. Explain the features of python :-

Easy to learn and use.

Expressive languages :- understandable and readable

Interpreted Language :- Debugging is Easy.

Cross platform language :- portable Language. It can run Equally at different Platforms.

free and open surface :- It is freely available at official web address.

object oriented language :- It supports concepts at class and objects came into existence.

Extensible :- It implies that other languages such as c, C++ can be used to compile the code.

GUI programming Support :- It can be easily Integrated with languages like C, C++, Java

Integrated :- Graphical user interfaces can be devolped using python.

5. Justify Python as an interactive interpreated Language?

Python is an interpreted object Oriented programming language. the interpreted is meant that Each time a Program, is run the interpreter checks through the code for errors and interprets the instruction into machine readable bytecode.

It is a translator in Computer language which translate the given code line by line in machine readable byte code if any Error Encountered it stops the translation until the Error is fixed.

Interactive python is very much helpful for debugging purpose. It Simply return the >>> prompt for the corresponding output at the Statement is appropriate and returns foran incorrect statements. With in Second, You can find Errors in python. debugging the error is Easy.