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① Explain the data type in ~~Play~~ Python ? Explain:

They are 5 types

1. Numbers
2. String
3. List
4. Tuple
5. dictionary.

① Numbers: Numbers store numeric values. Python creates number objects when a number is assigned to a variable Python supports four types of numeric data:

1. int
2. long
3. float
4. Complex

② String:- it is defined as a sequence of characters represented in the quotation makes. In python, use can use single, double & triple quotes to define a string

③ List: ~~It~~ It is similar to array in c. However, the list can contain data & different types. The items stored in the list are separated with a comma, and enclosed within square brakets[]

④ Tuple:- it is similar to the list in many way. like lists tuples also contains the collection of the items of diff data types. It is seperated with a commas & enclosed with paranthes

It is a read only data structure as we can't modify the size and value of the items of a tuple.

5) **Dictionary:** It is an ordered set of key-value pair of items

It is like an associative array or a hash table where each key stores a specific value.

① Briefly explain history of Python

The programming language Python was conceived in the late 1980s and its implementation was started in December 1989 by Guido van Rossum at CWI in the Netherland as a successor to ABC capable of exception handling & interfacing with the Amoeba operating system. Python was named by the BBC TV show Monty Python's Flying Circus.

Python 2.0 was later released on at 16 2000 with major new features, including a cycle-detecting garbage collector for memory management & support for Unicode.

Python 3.0 a major backwards incompatible release was released on Dec 3, 2008 after a long period of testing. Many of its major features have also been backported to backward while be now unsupported Python 2.6 & 2.7.

③ Explain all the operators in Python

① Arithemic operators: It perfon various arithmetic calculations like addition, Subtraction, Multiplication, divison, Modules, etc. These are various methods for arithmetic calculation in python like you can use the function, declare variable & calculate a call Functions

② Comparsion operators: These operation compare the value on either side of the operators & determine the relation between them. It is also referred as relational operators. various comparison operators are & (==, !=, <>, >, <= etc).

③ Assignment operator: It is used for assigning the value of the right to the left operand variables assigned. Operators are used in Python are it =, ==, *=1>)

④ logical operator:- In Python are used for conditional statements are true or false. logical operators in Python or AND, OR & Not, for logical operators following conditions are applied

. AND Operator:- It returns TRUE if both the operand's are true

. OR operator:- It returns True if either of the operand is true

. NOT operator:- It returns True if operand is false

⑤ Membership Operator: These operators test for membership in sequence such as lists, strings or tuples, Here are two membership operators in python (in, not in). It gives result based on the variable present in specified sequence as string.

⑥ identify operator:- To compare the memory location of two objects, identity operators are used the two identity operational (is, is not)

④ Explain the features of python.

① Easy to learn & use:

Python is easy to learn & use. It is developer. friendly high level programming language

② Expressive language:-

Python language is more expressive means that is more understandable & readable

③ Interrupted language:-

It interpreter executes the code line by line at a time. This makes debugging easy & thus suitable for beginners

④ Cross platform ~~lang~~ language:-

Python can run equally on different platforms such as windows, linux, unix & maintenete. So, we can say that python is a potable language

⑤ Free & open source:-

Python language is freely available at offical web address. The source code is available. Therefore it is opensource.

⑥ objects oriented language:-

Python supports object oriented language & concepts of classes & objects come into existence.

⑦ Large standard library:

It provids rich set of module & functions for rapid application development

⑧ Gui ~~pro~~ programing support.

Graphical user interface can be developed by using python

⑨ integrated.

It can be easily integrated with languages like C, C++, JAVA etc

⑤ Justify why python is ~~too~~ interactive interpreted language

Unlike C/C++ etc, python is an interpreted object oriented programming language... unlike C language which is a compiled programming language. The compile translats the whole code in one-go rather than line-by-line. This is the reason why in C language all the error are listed during comple

Python is ~~in~~ interactive. when a python statements is entered and is followed by the Return key if appropriate the result will be printed on the screen, immediately giving the next ling. interactive python is very much helpful for the debugging purpose. it simply return the >>> prompt or the corresponding output of the statement if appropriate and returns error for incorrect statements.