



How Python is interpreted?

Python language is an interpreted language. Python program runs directly from the source code. It converts the source code that is written by the programmer into an intermediate language, which is again translated into machine language that has to be executed.

What is the difference between list and tuple?

The difference between list and tuple is that list is mutable while tuple is not.

What are the built-in type does python provides?

There are mutable and Immutable types of Python's built-in types:

Mutable built-in types

- List
- Sets
- Dictionaries

Immutable built-in types

- Strings
- Tuples
- Numbers

What are types of operators in Python?

The types of operators in Python are:

1. Arithmetic Operators
2. Comparison Operators
3. Logical Operators
4. Bitwise Operators
5. Assignment Operators
6. Identity Operators and Membership Operators

What are strings in Python?

Strings are immutable data type in Python. They can be a combination of letters, numbers, and special characters. It can be declared in python by using single quotes, double quotes. Elements of the string can be accessed using indexing or slicing operations.

What are Sets in Python?

Python set is an unordered datatype (its elements do not have index). Sets cannot have a duplicate value (elements).

set1= {2,3,4,6} print(set1) set1.add(12) print(set1) set1.remove(4) print(set1)	Output: {2, 3, 4, 6} {2, 3, 4, 6, 12} {2, 3, 6, 12}
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What is Dictionary in Python?

Dictionary data type in Python is a collection of keys and its values. It holds **key: value** pair. Values in a dictionary can be of any data type and can be duplicated, whereas keys must be unique.

Note: Dictionary keys are case sensitive

What are identity operators in Python?

is and **is not** are the identity operators in Python.

E.g:

a=12 b=13 print(a is not b) print(a is b)	Output: True False
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What are membership operators in Python?

in and **not in** are the membership operators that are used to test whether a value or variable is in a list/tuple.

E.g:

a=12 b=13 list1=[10,12,14,16] print(a in list1) print(b not in list1)	Output: True True
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What is pass in Python?

Pass means, no-operation Python statement, or in other words it is a place holder in compound statement, where there should be a blank left and nothing has to be written there.

What is break in Python?

Break in Python is a loop control statement. It is used to control the sequence of the loop. Suppose you want to terminate a loop and skip to the next code after the loop; break will help you do that.

What is Continue in Python?

Break in the continue statement is used to skip the current iteration of the loop and the control flow of the program goes to the next iteration.

What is a list comprehension in Python?

List comprehension is an elegant way to define and create a list in Python. We can create lists just like mathematical statements in one line only.

In Python what are iterators?

In Python, iterators are used to iterate a group of elements, containers like list.

In Python what is slicing?

A mechanism to select a range of items from sequence types like list, tuple, strings etc. is known as slicing.

What is negative index in Python?

Python sequences can be index in positive and negative numbers. For positive index, 0 is the first index, 1 is the second index and so forth. For negative index, (-1) is the last index and (-2) is the second last index and so forth.

How you can convert a number to a string?

In order to convert a number into a string, use the inbuilt function `str()`.

Mention what are the rules for local and global variables in Python?

Local variables: If a variable is assigned a new value anywhere within the function's body, it's assumed to be local.

Global variables: Those variables that are only referenced inside a function are implicitly global.

Mention the use of the split function in Python?

The use of the split function in Python is that it breaks a string into shorter strings using the defined separator. It gives a list of all words present in the string.

Does Python supports multiple Inheritance?

Python does support multiple inheritances, unlike Java. Multiple inheritances mean that a class can be derived from more than one parent class.

What is Polymorphism in Python?

Polymorphism means the ability to take multiple forms. So, for instance, if the parent class has a method named ABC then the child class also can have a method with the same name ABC having its own parameters and variables. Python allows polymorphism.

Define encapsulation in Python?

Encapsulation means binding the code and the data together. A Python class is an example of encapsulation.

How do you do data abstraction in Python?

Data Abstraction is providing only the required details and hides the implementation from the world. It can be achieved in Python by using interfaces and abstract classes.

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