

1) What is `__init__`?

"`__init__`" is a reserved method in python classes. It is called as a constructor in object oriented terminology. This method is called when an object is created from a class and it allows the class to initialize the attributes of the class.

2) What is `self` in python?

The `self` parameter is a reference to the current instance of the class, and is used to access variables that belong to the class.

3) How can you randomize the items of a list in place in python?

To randomly shuffle elements of lists (`list`), strings (`str`), and tuples (`tuple`) in Python, use the `random` module. `random` provides `shuffle()` that shuffles the original list in place, and `sample()` that returns a new list that is randomly shuffled. `sample()` can also be used for strings and tuples.

4) What are python iterators

An iterator is an object that contains a countable number of values. An iterator is an object that can be iterated upon, meaning that you can traverse through all the values. Technically, in Python, an iterator is an object which implements the iterator protocol, which consists of the methods `__iter__()` and `__next__()`.

5) What is pickling and unpickling in python

"Pickling" is the process whereby a Python object hierarchy is converted into a byte stream, and "unpickling" is the inverse operation, whereby a byte stream (from a binary file or bytes-like object) is converted back into an object hierarchy.

6) What are the generators in python

Python generators are a simple way of creating iterators. All the work we mentioned above are automatically handled by generators in Python. Simply

speaking, a generator is a function that returns an object (iterator) which we can iterate over (one value at a time).

7) How will you capitalize the first letter of string in python

The first letter of a string can be capitalized using the `capitalize()` function. This method returns a string with the first letter capitalized. If you are looking to capitalize the first letter of the entire string the `title()` function should be used.

8) How to comment multiple lines in python

To write multi-line comments in Python, prepend a `#` to each line to block comments. That means writing consecutive single-line comments. Start every line with `#` sign consecutively, and you will achieve multi-line comments.