1. What is \_\_init\_\_?

\_\_init\_\_ is one of the reserved methods in Python. In object oriented programming, it is known as a constructor. The \_\_init\_\_ method can be called when an object is created from the class, and access is required to initialize the attributes of the class.

1. What is self in python?

The self in keyword in Python is used to all the instances in a class. By using the self keyword , one can easily access all the instances defined within a class, including its methods and attributes.

1. How can you randomize the items of a list in place in python?

The method shuffle() can be used to randomize the items of a list in place. It should be noted that this function is not accessible directly and therefore we need to import or call this function using random static object.

Syntax:   shuffle (lst)

Here, ‘lst’ is passed as a parameter which could be a list or tuple. The shuffle() returns a reshuffled list of items.

1. What are python iterators?

An iterator in Python is an object that contains a countable number of elements that can be iterated upon. In simpler words, we can say that Iterators are objects that allow you to traverse through all the elements of a collection and return one element at a time.

1. What is pickling and unpickling?

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.

1. What are 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).

1. How will you capitalize the first letter of string?

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.

1. How to comment multiple lines in python?

A way to add multiline comments is to use triple-quoted, multi-line strings. String literals can be used within the code to insert multiline comments and do not generate any code.

1. What is the difference between process and thread?

A process is an active program i.e. a program that is under execution. It is more than the program code as it includes the program counter, process stack, registers, program code etc. Compared to this, the program code is only the text section.

A thread is a lightweight process that can be managed independently by a scheduler. It improves the application performance using parallelism. A thread shares information like data segment, code segment, files etc. with its peer threads while it contains its own registers, stack, counter etc.