

ASSIGNMENT -4

`__Init__` in Python:

"`__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

Self in Python:

Self is the first argument to be passed in Constructor and Instance Method. Self must be provided as a First parameter to the Instance method and constructor. If you don't provide it, it will cause an error.

How can Randomized 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)`

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 consist of the methods `__iter__()` and `__next__()` .

Pickling and Unpickling in python:

Pickling:

The process to convert any kind of python objects (list, dict, etc.) into byte streams (0s and 1s) is called pickling or serialization or flattening or marshallng.

Unpickling:

Unpickling is the inverse operation, whereby a byte stream (from a binary file or bytes-like object) is converted back into an object hierarchy by a process called as unpickling.

Generators in Python:

What are Python Generators? Python Generator functions allow you to declare a function that behaves like an iterator, allowing programmers to make an iterator in a fast, easy, and clean way. An iterator is an object that can be iterated or looped upon.

How will 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.

How to comment multiple lines in Python:

Unlike other programming languages Python doesn't support multi-line comment blocks out of the box. The recommended way to comment out multiple lines of code in Python is to use consecutive `#` single-line comments.

Single line comment. `Ctrl + 1`.

Multi-line comment select the lines to be commented. `Ctrl + 4`.

Unblock Multi-line comment. `Ctrl + 5`.