**PYTHON ASSINGMENT**

*1.what is \_\_init\_\_?*

*The \_\_init\_\_ method is the Python equivalent of the C++ constructor in an object-oriented approach. The \_\_init\_\_ function is called every time an object is created from a class. The \_\_init\_\_ method lets the class initialize the object's attributes and serves no other purpose. It is only used within classes.*

*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 belongs to the class.*

*3. how can you randomize the item 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?*

*In Python, an iterator is an object which implements the iterator protocol, which means it consists of the methods such as \_\_iter\_\_() and \_\_next\_\_(). An iterator is an iterable object with a state so it remembers where it is during iteration. For Example, Generator.*

*5.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.*

*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?*

*To capitalize the first character of a string, We can use the charAt() to separate the first character and then use the toUpperCase() function to capitalize it.*

*8.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.*