**Assignment\_14**

Q1. Is an assignment operator like += only for show? Is it possible that it would lead to faster results at the runtime?

**Ans: No its not for show. += directly operates on variable.**

Q2. What is the smallest number of statements you'd have to write in most programming languages to replace the Python expression a, b = a + b, a?

Ans:

Q3. In Python, what is the most effective way to set a list of 100 integers to 0?

**Ans: list(range(0,100)**

Q4. What is the most effective way to initialise a list of 99 integers that repeats the sequence 1, 2, 3? S If necessary, show step-by-step instructions on how to accomplish this.

Ans: **: list(range(0,99)**

Q5. If you're using IDLE to run a Python application, explain how to print a multidimensional list as efficiently?

**Ans: for ex - arr1 = [[1, 2, 3, 4], [8, 9, 10, 12]]**

Q6. Is it possible to use list comprehension with a string? If so, how can you go about doing it?

**Ans : Yes its possible. List comprehension can identify when it receives a string or a tuple and work on it like a list.**

Q7. From the command line, how do you get support with a user-written Python programme? Is this possible from inside IDLE?

**Ans: Yes, it is possible. A python interpreter will be running inside a terminal window.**

Q8. Functions are said to be “first-class objects” in Python but not in most other languages, such as C++ or Java. What can you do in Python with a function (callable object) that you can't do in C or C++?

Q9. How do you distinguish between a wrapper, a wrapped feature, and a decorator?

**Ans : Wrapper is the alternative name for Decorator pattern. It is an object that can be linked with some target object. Decorator allows objects to be composed or add capabilities by wrapping them with a class with the same interface.**

Q10. If a function is a generator function, what does it return?

**Ans : It returns an iterator object with a sequence of values.**

Q11. What is the one improvement that must be made to a function in order for it to become a generator function in the Python language?

**Ans : We should use yield statement instead of a return statement.**

Q12. Identify at least one benefit of generators.

**Ans : Generators functions allow you to declare a function that behaves like an iterator. They allow programmers to make an iterator in a fast , easy, and clean way.**