**Assignment 25**

Answer 1

[] ==> square brackets means a list

() ==> paranthesis are tuple

Answer 2

A generator is a special type of function which does not return a single value, instead, it returns an iterator object with a sequence of values. In a generator function, a yield statement is used rather than a return statement.

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\_\_() .

Answer 3

yield function signifies if the function is generator function.

Answer 4

Yield statement is used to make generator function.

Answer 5

List comprehension is more concise and easier to read as compared to map

List comprehension allows filtering. In map, we have no such facility. For example, to print all even numbers in range of 100, we can write [n for n in range(100) if n%2 == 0]. There is no alternate for it in map

List comprehension are used when a list of results is required as map only returns a map object and does not return any list.

List comprehension is faster than map when we need to evaluate expressions that are too long or complicated to express

Map is faster in case of calling an already defined function (as no lambda is required).