**Assignment\_13**

Q1. Can you create a programme or function that employs both positive and negative indexing? Is there any repercussion if you do so?

**Ans: Yes, slicing is the common practice in python and can be used both with positive indexes as well as negative indexes.**

Q2. What is the most effective way of starting with 1,000 elements in a Python list? Assume that all elements should be set to the same value.

**Ans: range(0,1001)**

Q4. Explain the distinctions between indexing and slicing.

**Ans: “Indexing” means referring to an element of an iterable by its position within the iterable. “Slicing” means getting a subset of element of elements from an iterable based on their indices.**

Q5. What happens if one of the slicing expression's indexes is out of range?

**Ans: While slicing expression, if it goes out of range then the expression will return empty sequence**.

Q6. If you pass a list to a function, and if you want the function to be able to change the values of the list—so that the list is different after the function returns—what action should you avoid?

**Ans: You should reverse or perform different operations inside the function.. so that function returns the new list.**

Q7. What is the concept of an unbalanced matrix?

**Ans: Whenever the cost matrix of an assignment problem is not a square matrix, i.e. whenever the number of sources is not equal to number of destinations, the assignment problem is called an unbalanced assignment problem**.

Q8. Why is it necessary to use either list comprehension or a loop to create arbitrarily large matrices?

**Ans: List comprehension or loops append new elements to it at each iteration**.