iNeuron Assignment 4

1. What exactly is []?

Ans :- [] represents to an empty list or tells that the type of value which is going to be stored in this of type 'List

2. In a list of values stored in a variable called spam, how would you assign the value 'hello' as the third value? (Assume [2, 4, 6, 8, 10] are in spam.)

Ans :- spam = [2,4,6,8,10]
Third value in spam is 6 and index of 6 is 2 (0,1,2)
So,
spam[2]='hello'
print(spam)

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Output
[2,4,'hello',8,10]

****Let's pretend the spam includes the list ['a','b','c','d'] for the next three queries.**

3. What is the value of spam[int(int('3' * 2) / 11)]?

Ans :- The answer is **d**.

4. What is the value of spam[-1]?

Ans :- The answer is **d.**

5. What is the value of spam[:2]?

Ans :- The value is **['a','b'].**

****Let's pretend bacon has the list [3.14, 'cat' ,11, 'cat', True] for the next three questions.**

6. What is the value of bacon.index('cat')?

Ans :- The answer is **1**

7. How does bacon.append(99) change the look of the list value in bacon?

Ans :- **[3.14, 'cat' ,11, 'cat', True, 99]** as append() adds the value in the last of the list

8. How does bacon.remove('cat') change the look of the list in bacon?

Ans :- [3.14 ,11, 'cat', True] remove() would remove the first found 'cat'

9. What are the list concatenation and list replication operators?

Ans :- For concatenation we use **+** and for replication ***.**

10. What is the difference between the list methods append() and insert()?

Ans :- When we use append() the value is append at the last of the list whereas in insert() the value is added the index passed by the user

Ex :-

Syntax
l.append('hello')
l.insert(2,'hello')

11. What are the two methods for removing items from a list?

Ans :- The two methods are pop() and remove().

12. Describe how list values and string values are identical.

Ans :- String and list values both are mutable.

13. What's the difference between tuples and lists?

Ans :- Tuples are Immutable and Lists are Mutables.

14. How do you type a tuple value that only contains the integer 42?

Ans :- **(42,)**

15. How do you get a list value's tuple form? How do you get a tuple value's list form?

Ans :- It can be done by casting Ex:-
l=[1,2,3]
t=(1,2,3)
print(tuple(l)) - - Conversion of list to tuple

print(list(t)) - - Conversion of tuple to list

16. Variables that "contain" list values are not necessarily lists themselves. Instead, what do they contain?

Ans :- They contain the reference of the list objects.

17. How do you distinguish between copy.copy() and copy.deepcopy()?

Ans :- copy.deepcopy() will duplicate any list inside the list whereas copy.copy() will do the shallow copy

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