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Assignment : 4th

1. What exactly is []?

It is square bracket which basically we use in python to indicate as a list container. Apart from using it as a list container it is also being used to represent index of an array.

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.)

spam = [2,4,6,8,10]

spam.insert (2, “hello”)

print(spam)

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)]?

‘d’

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

‘d’

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

[‘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')?

1

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

[3.14,’cat’,11,’cat’,True,99]

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

[3.14, 'cat,' 11, True,99]

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

List Concatenation: We use list concatenation operators to add two different lists together

Ex: L1 = [1,2,3,4,5]

L2=[6,7,8,9,0]

Print(L1 + L2)

Output : [1,2,3,4,5,6,7,8,9,0]

List Replication : As its name implies we use list replication operator to replicate any list.

Ex : print(L2\*2)

Output : [6,7,8,9,0,6,7,8,9,0]

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

“Append” add the given value at the very last position by default, but when we have to add values in any specific index or position then we use “insert()” method and pass the indexing position inside it. That’s the difference.

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

items.remove() and items.pop(), we just have to add the list tuple or dictionary name (taken items here) before this methods.

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

Both have indexes

Both can be used in slicing.

Both can be used under len() function.

Both can be use under for loop.

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

Tuples are Immutable, once we declare we can’t change the values inside it, Whereas Lists are mutable, just vice versa of tuples, we can change values anytime in a list.

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

T1 = (42,) Here comma is mandt, or else it will be considered as an integer.

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

Just by adding list and tuple as a function name.

List to Tuple :

L1 = [1,2,3,4,5]

print(tuple(L1))

Tuple to List:

T1 = (1,2,3,4,5)

print(list(T1))

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

Reference of list values.

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

copy.copy will do only a shallow copy of list but copy.deepcopy will do deep copy of a list, if we want duplication of a list inside a list then we must go with second functionality.