Assignment-4

1. What exactly is []?

Ans: This is nothing but an empty 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]

spam.insert(2,’hello’)

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: we will get d. As the result will be 3. So spam[3]= d

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

Ans: The value will be ‘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 value will be 1.

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

Ans: The list will be

bacon= [3.14, ‘cat’,11, ‘cat’, True,99]

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

Ans: The list will be

bacon= [3.14, 11, ‘cat’, True]

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

And: The operator for list concatenation is +, while the operator for replication is *. (This is the same as for strings.)

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

Ans: The append method will always add the item in the last position to the existence list while the insert method will append at certain position.

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

Ans: The two method are:

- pop()
- remove()

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

Ans: The components of a list are referred to as its elements. Lists are similar to strings, which are ordered collections of characters, with the exception that a list's elements can be of any type, and where string only contain character type elements.

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

Ans: Tuple is immutable data type while list is mutable data type. It means if we store data in tuple we cannot change it later but in list we can change it.

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

Ans: z= 42,

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

Ans: We get list value's in tuple form using tuple().

We get tuple's value list form using list().

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

Ans

: They contain references to list values.

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

Ans: copy.copy() create reference to original object. If you change copied object - you change the original object. copy.deepcopy() creates new object and does real copying of original object to new one. Changing new deepcopied object doesn't affect original object.