1. What exactly is []?

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.)

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)]?

Answer is 6

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

It is ‘d’

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

[2,4]

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, 11, 'cat,' True,99]

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

Concatenation is achieved by +operator while replication is achieved by \* operator.

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

Append() is used to add a value to the list at the end.

Insert() is used to add the vslue at particular index

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

Remove and del. Remove is used when the value in the list is known and has to be removed from the list

Del is used if we know the index of the value to be removed.

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

List and stringboth are collection of data but list can hold any data type while string can hold only characters.

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

Tuples are immutable. Lists are mutable.

Tuples have less no of built in functions but lists have many.

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

T1=(42, )

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

T1=(1,a,b,c)

L1=list(T1)

L1=[1,a,b,c]

T1= Tuple(L1)

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

You can store a number, a string, and even another list within a single list.

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

copy.copy() copies a list to another list.

copy.deepcopy() copies all the list and its sublists at a time.