1. What exactly is []?

Ans : the list that contains no items(empty list).

1. 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]=’hello’

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

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

Ans : ‘d’

‘3’ \* 2 will be ‘33’

Int(‘33’)//11 = 33/11 = 3

Int(3) = 3

Spam[3] = ‘d’

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

Ans : ‘d’

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

Ans : [‘a’, ‘b’]

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

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

Ans : 1

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

Ans : [3.14, 'cat,' 11, 'cat,' True]

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

Ans : [3.14,11,’cat’,True]

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

Ans : + for concatenation

\* for replication.

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

Ans : append() will add values only to the end of a list, whereas insert() can add anywhere in the list.

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

Ans : del statement and remove().

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

Ans : Both can be passed to len(), have indexing and slicing and can used for concatenation and replication.

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

Ans :

* lists are mutable i.e., we can add,remove or can change the values. But, tuples are immutable i.e., we cannot be changed at all.
* List use [ ] brackets ,while tuples use ( ).

1. 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 : by using tuple( ) and list( ) functions respectively.

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

Ans : References to list values.

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

Ans : copy.copy( ) will do a shallow copy of a list, while copy.deepcopy( ) do a deep copy of a list i.e., it will duplicate any lists inside the list.