1. What exactly is []?

Ans-The empty list value, which is a list value that contains no items

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]=’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-‘d’

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

Ans- ‘d’

5. 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.

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]

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

Ans-The operator for list concatenation is +, while the operator for replication is \*.

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

Ans- append() adds an item to the end of a list, whereas . insert() inserts and item in a specified position in the list

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

Ans- The methods are remove(), pop() and clear().

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

Ans- Both strings and lists have lengths: a string's length is the number of characters in the string; a list's length is the number of items in the list.

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

tuples are immutable as opposed to lists which are mutable.

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

(42,)

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

Using the tuple() built-in function and list() function

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

Variables will contain references to list values rather than list values themselves. But for strings and integer values, variables simply contain the string or integer value.

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

shallow copy constructs a new compound object and then (to the extent possible) inserts references into it to the objects found in the original. A deep copy constructs a new compound object and then, recursively, inserts copies into it of the objects found in the original.

The copy() returns a shallow copy of the list, and deepcopy() returns a deep copy of the list.