1. What exactly is []?

Enclosed square bracket indicates list. And the above brackets is 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.)

spam[2]=’Hello’ adds hello as third element.

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)]?

spam[int(int(33 / 11))]

spam[int(3)]

spam[3]

returns the index value of 3 i.e the fourth value ‘d’.

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

Returns ‘d’ as negative index are taken from last.

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

Returns [‘a’,’b’] as slicing excludes last value.

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')?

Returns index 1 as it is the first occurrence.

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

Above statement adds 99 to its last element in list, which is [3.14, 'cat’, 11, 'cat’, True, 99]

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

Above command removes the first occurrence of cat, which is [3.14, 11, 'cat’, True]

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

Concatenation operation means addition + and replication means multiplication \*.

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

Append adds an element to the last and insert adds an element in the given position.

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

del() and remove() methods are used for removing the items from the list.

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

Both values of list and string are identical as they can be iterated, concatenated, replicated and can be sliced.

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

List are indicated with square brackets [] and tuples are indicated with parenthesis (). List are mutable entities where as tuples are immutable entities.

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

(42,) the succeeding coma is must.

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

We must change the data type to list() and tuple() respectively.

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

Variable contains reference to list values rather than list values themselves.

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

copy.copy() does a norml copy of list. copy.deepcopy() duplicates the lists in list.