1. What exactly is []?

Ans: It is a 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]=’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')?

Ans: 1

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

Ans : [3.14,’cat’,11,’cat’,True,99]

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

Ans : [3.14,,11,’cat’,True,99]

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

Ans: + & \*

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

Ans: Insert function allows us to add element at a specified index of the list unlike the append where we can add the element only at the end of the list.

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

Ans: Pop(), remove()

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

Ans: Both list and string values are store in as a sequential order in memory.

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

Ans: Tuple is immutable means once assigned you can not change the value. Whereas list is mutable we can change the list values whenever you required.

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

Ans : A=(42,)

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

Ans: 1) tuple(list) 2) list=[tuple]

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

Ans: They contains the references of the list values.

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

Ans: copy.copy() method does not create new object, when you make changes in copied one that changes reflects original data. Where as copy.deepcopy() create one fresh object whatever changes you make that does not affects the original one.