1. What exactly is []?

Ans: [] is used to indicate empty list. 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')?

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: List concatenation operator: list1 + list2

List replication operator: list1 \* 2

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

Ans: We use append() to add the value at the end of the list. Insert() is use to add the value anywhere in the list.

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

Ans: del and remove() are used to remove items in the list.

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

Ans: We can use multiple operations both in list ad strings. Both are having indexes, slicing operations. We can use both in for loops for iterations. Both can be concatenated and replicated.

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

Ans: Tuples are immutable while lists are mutables. We use parentheses () in tuples and square brackets [] in lists.

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

Ans: we use (42, )

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

Ans: list1=[2,3,4,5] and tup1=(9,8,7,6)

tuple(list1) and list(tup1)

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

Ans: They contain references to list values.

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

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