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.)

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

Ans: spam[2]=’hello

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

Ans: ‘d’. String ‘3’ is multiplied with 2 and then divided by 11, i.e., 33/11=3.

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.(**NOTE: There’s a syntax error however I’ve ignored the same and corrected the list as - bacon = [3.14, 'cat', 11, 'cat', True])**

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: The operator for list concatenation is ‘+’ and list replication operator is ‘\*’.

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

Ans: List() can add values anywhere in the list & Append() will add values only at the end.

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

Ans: Del() & remove()

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

Ans: Both list and string can be concatenated or replicated, be used in loops, have indexes, can be sliced, can be used with IN and NOT IN operators & both can be passed to len().

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

Ans: Lists are mutable, they can have values added, removed or changed. Tuples are immutable, they cannot be changed at all. Also, tuples are using (parentheses) and lists use the [square bracket]

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

Ans: tuple=(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

l1 **=** [2,3]

l **=** tuple(l1)

l

(2, 3)

t1 **=** (3,4)

t **=** list(t1)

t

[3, 4]

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() will do a shallow copy of the Iist.

The copy.deepcopy() will do a deep copy of the list however only copy.deepcopy() will duplicate any lists inside the list.