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'** (Notice that the third value in a list is at index 2 because the first index is 0.

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- Note that '3' \* 2 is the string '33', which is passed to int() before being divided by 11. This eventually evaluates to 3. So, spam[3]= ‘d’.

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

Ans-spam[-1]=’d’.

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

Ans-‘c’ will be the output.

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,True,99]

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-  The difference between the two methods is that . **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- The similarity between Lists and Strings in Python is that **both are sequences**.

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

Ans- The primary difference between tuples and lists is that **tuples are immutable as opposed to lists which are mutable**

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

Ans- **(42,)**

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

Ans- **Using the tuple() built-in function.**

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

Ans- 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()?

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