1. What exactly is []?

**Ans** : [] denotes 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.)

**Ans** : spam.insert(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** : To concatenate use + operator & to replicate use \* operator.

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

**Ans** : append() is used to add an element at end of the list means at last index position. Whereas insert() is used to insert element to list at desired index position.

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

**Ans** : The two methods to remove items from list are as follows : i) .pop() is used to remove last element of list. ii) .remove(item) : is used to remove any desired element from list by mentioning it inside parentheses. For eg. Bacon.remove(‘cat’)

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

**Ans** : list and string both are sequences. We can access the individual elements of both list & string with the help of index.

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

**Ans** : Tupples are immutable whereas lists are mutable objects, means tuples cannot be modified whereas lists can be modified.

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

**Ans** : We write it by putting comma after 42 inside parentheses. E.g. : a = (42,) Without comma it would consider it as integer value assignment.

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

**Ans** : We can get list value’s tuple form & vice versa by doing typecasting.

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

**Ans** : They contain references to the list values.

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

**Ans :** In a normal list copy.copy() & copy.deepcopy() behave in same manner. Copy.deepcopy() comes into action in case of nested list. When we don’t use .copy() function and assign a same value to 2 variables & when we make any changes to one variable then the same changes get reflected to 2nd variable as well, because they both refer to same memory location. When .copy() function is used it creates its copy in separate memory location.