1. What exactly is []?

**Answer – [] is used for storing values in a 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.)

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

**Answer –**

**Spam[2]=’hello’**

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

**Answer - d**

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

**Answer - d**

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

**Answer – ‘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')?

**Answer - 1**

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

**Answer -** [3.14, 'cat,' 11, 'cat,' True, 99]

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

**Answer -** [3.14, 11, 'cat,' True, 99]

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

**Answer – Concatenation – “+” , Replication – spam[::-1]**

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

**Answer – Append adds a value at the end of the list whereas insert can add a value at any location of a list.**

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

**Answer – remove() and pop()**

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

**Answer – List and String both are accessed using same functions. Both contain the values and both are mutable. Major difference is only that List can hold values of any data type but String can hold values of only string type.**

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

**Answer – Although Lists and Tuples are both used for storing values but major difference is of mutability, that is Lists are mutable but Tuples are immutable.**

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

**Answer -**

**tuple1=(42)**

**tuple1[0] will give the value 42.**

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

**Answer – It can be done by using functions respectively for tuple and list tuple(list\_name), list(tuple\_name).**

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

**Answer – List can be stored in a tuple, set or dictionary. Hence, it is not necessarily a list.**

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

**Answer - copy.copy() only copies the values but copy.deepcopy() also copies the memory references.**