1. What exactly is []?

**It’s 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.)

**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)]? **d**

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

5. What is the value of spam[:2]? **[‘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')? **1**

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

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

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

**[3.14, 11, 'cat,' True]**

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

**Concatenation : +**

**Replication : \***

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

**Append inserts a new element to the end of the list**

**Insert inserts a new element at the specified index position**

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

**Pop and Remove will remove elements in a list**

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

**They both have same methods for manipulation.**

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

**List is mutable but Tuples are immutable**

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

**a = 42**

**tuple(a)**

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

**T = tuple(L)**

**L = list(T)**

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

**List valiables can be any datatype like int, float, string, list, tuple, dict etc**

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

**Copy() function creates an object and create reference to the child elements from the original to copy thereby changing the copy would reflect in the original**

**Deepcopy() function creates an object and copies all the child elements from the original to the copy thereby changing the copy wouldn’t reflect in the original.**