1. What exactly is []?

**[] is a list or array with no values stored in it. 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[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)]?

**‘3’\*2 is ‘33’**

**int(‘33’) is 33**

**int(33/11) is 3**

**spam[3] is ‘d’**

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

**‘d’**

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

**It evaluates list from 0 to 2 not including value of index 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')?

**Returns the position of the first occurrence of the value, which is 1.**

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

**It will add 99 to it’s end. The list will look like: [3.14, 'cat,' 11, 'cat,' True, 99]**

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

**It will remove the first occurrence of the value provided. The list will look like:**

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

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

**Concatenation operator is +, replication operator is \***

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

**append() will add a value at the end of the list, insert() will add the value where the index position is provided.**

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

**pop(), remove() and del**

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

**They both have indices starting from 0. Every character in a string is indexed in the same way a list values are indexed. Also, they can be manipulated in the same way, for example in for loops, etc.**

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

**You cannot change tuples like you would with lists. In tuples values stored in parentheses and in lists they stored in square brackets.**

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

**(24,)**

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

**You can get a list from a tuple with list() function and you can get a tuple from a list with tuple() function.**

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

**They contain references to a list values.**

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

**copy() makes a copy only of the first level of the list tree (shallow copy), deepcopy() will copy all levels of the list tree, including all nested values or nested lists.**