1. What exactly is []?

**We can define a list using this. Also, we can do indexing using this**

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, 99]**

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

**List concatenation is concatenating lists into one list. For example, if a= [1,2] and b= [3,4], then c=a+b will concatenate into [1,2,3,4]. For replication, c=a\*2 will provide [1,2,1,2] replicating a .**

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

**append()add object to the end of the list**

**insert() insert object before index**

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

**remove(),clear()**

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

**The similarity between Lists and Strings in Python is that both are sequences.**

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

**One of the most important differences between list and tuple is that list is mutable, whereas a tuple is immutable. This means that lists can be changed, and tuples cannot be changed**

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

**(42)**

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

**Let’s say, A\_list=[1,2] ,A\_tuple=(1,2)**

**tuple(A\_list) gives list value's tuple form**

**list(A\_tuple) gives tuple value's list form**

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

**They can be any data type int, float, str etc.**

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

**copy.copy() return a shallow copy (any changes made to a copy of object do reflect in the original object) while copy.deepcopy() return a deep copy (any changes made to a copy of object do not reflect** in the original object)