1. What exactly is []?

**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[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 appends two or more lists into one. List concatenation operator is ‘+’. List replication operator will replicate the list the given number of times. List replication operator is ‘\*’**

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

**Append will add the elements in the end of the list.**

**Insert method will insert the given element at the specified index location.**

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

**Remove method and pop method**

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

**List values and string values can be indexed and are iterable.**

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

**Tuples are within small brackets () and lists are enclosed within square brackets []. Tuples are immutable objects whereas Lists are mutable objects.**

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

**t=(42,)**

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

**Using zip function and map function**

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

**They contain the location of the list**

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

**Copy.copy() will shallow copy the original list to the new list, meaning only one level down will be independent. The references of the child objects would still be in copied list.**

**Copy.deepcopy() will make two lists independent of each other. Any change in any level will not affect the original list.**