1. What exactly is []? **Ans: Used to specify the List data type**

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.) **Ans : 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)]? **Ans: ‘d’**

4. What is the value of spam[-1]? **Ans: ‘d’**

5. What is the value of spam[:2]? **Ans:[‘a’,’b’]**

Let's pretend bacon has the list [3.14, 'cat,' 11, 'cat,' True] for the next three questions.

**Correction: Comma should be after ‘cat’ as [3.14, 'cat’, 11, 'cat', True]**

6. What is the value of bacon.index('cat')? **Ans : 1**

7. How does bacon.append(99) change the look of the list value in bacon? **Ans: adds 99 to the end of bacon list like [3.14, 'cat', 11, 'cat', True, 99]**

8. How does bacon.remove('cat') change the look of the list in bacon? **Ans: Removes the first instance of the ‘cat’ and the list becomes [3.14, 11, 'cat', True, 99]**

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

**Ans: List Concatenation operator is + and list replication operator is \***

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

Ans: **append() -> adds an element at the end of the list whereas insert() -> inserts the element at the specified index location in the list**

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

**Ans: remove() and pop()**

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

Ans: **List values are sequential collection of values of any data types identified by its index and String values are also sequential collection of characters.**

13. What's the difference between tuples and lists? **Ans: Tuples are with () and are immutable which means once created cannot be changed whereas List is with [] and mutable**

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

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

**Ans: List Values tuple form: 1) using tuple() 2) tuple(i for i in spam)**

**tuple value's list form: 1)list() and 2)list(i for in spam)**

16. Variables that "contain" list values are not necessarily lists themselves. Instead, what do they contain? **Ans: Variables contain references to the list values**

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

**Ans: Shallow copy: copy() creates reference to original object. And when you change any element in the copied list, the change will reflect only in the copied list. No change in the original list But if the list is a nested list and If you change copied object - you change the original object.**

**deepcopy() creates new object and copies the original object to new one. New reference is created.**