1. What exactly is []?

Ans: [] is empty list. List which contain no item.

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.)

Let's pretend the spam includes the list ['a', 'b', 'c', 'd'] for the next three queries?

Ans: spam[2] = 'hello'

3. What is the value of spam[int(int('3' * 2) / 11)]?

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Ans: spam = ['a','b','c','d']

print(spam[int(int('3' * 2) / 11)]) ----- d i.e., 3
```

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.

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

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

Ans: [3.14, 11, 'cat', True, 99]

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

Ans: The operator for list concatenation is + and for replication is *.

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

Ans: Append() will add values at end of a list. Insert() will add anywhere in the list.

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

Ans: delete, remove can be used.

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

Ans: Both string and list has lengths. A length of a string is the number of characters in the string and a length of a list is the number of items in the list.

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

Ans: Lists are mutable; they can have values added, changed. Lists use the square brackets[and]. Tuples are immutable; they cannot be changed at all. Tuples are written using parentheses(and).

- **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: The tuple(list) and list(tuple) functions.

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

Ans: They contain reference to list values.

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

Ans: The copy.copy() function will do a shallow copy of a list, while the copy.deepcopy() function will do a deep copy of a list. That is, only copy.deepcopy() will duplicate any lists inside the list.