

1. What exactly is []?

**Sol-** [] 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.)

**Sol-** 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)]?

**Sol-** 'd'

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

**Sol-** 'd'

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

**Sol-** ['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')?

**Sol-** 1

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

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

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

**Sol-** [3.14, 11, 'cat', True]

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

**Sol-** Operator for list concatenation: +

Operator for list replication: \*

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

**Sol-** append() adds the value to the end of the list.

insert() adds the value at the index specified

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

**Sol-** The remove() method and the del statement can be used to remove values from a list.

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

**Sol-**lists and strings can both be indexed, sliced, used in for loops, and used with in and not in, be used with len(), and be concatenated and replicated

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

**Sol-** lists are mutable, tuples are immutable.

lists are defined with square brackets, [], while tuples are defined with parentheses ()

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

**Sol-**(42, )

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

**Sol-**

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

**Sol-**

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

**Sol-**