1. What exactly is []?

Answer 1: This is an empty list in python.

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.)

Answer 2: 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)]?

Answer 3: ‘d’

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

Answer 4: ‘d’

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

Answer 5: ['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')?

Answer 6: 1

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

Answer 7: [3.14, 'cat', 11, 'cat', True, 99]

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

Answer 8: [3.14, 11, 'cat', True, 99]

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

Answer 9:

List concatenation operator: ‘+’

List replication operator: ‘\*’

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

Answer 10: append() will append the new value at the end of the list.

Insert() will insert the new value at a specific location in the list.

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

Answer 11: Two methods of removing items from a list:

1. remove()
2. pop()

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

Answer 12: List and string values are identical in the way that they are iterable.

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

Answer 13: Lists are mutable (values can be changed, deleted, or added). Tuples are immutable (values cannot be changed, deleted, or added).

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

Answer 14: t = (42)

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

Answer 15: By using type casting:

List to tuple: t = tuple(l)

Tuple to list: l = list(t)

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

Answer 16: Variables of data type set, tuple and dict can also have list values.

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

Answer 17:

copy.deepcopy() creates a separate collection object and then copies all the attributes of the original.

Copy.copy() creates a separate collection object and then populates it with references to the original. Any changes made to the copy, affects the original in this case.