1. What exactly is []?

The empty list value, which is a list value that contains no items.

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.)

We are modifying third values, 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?

The operator for list concatenation is +, while the operator for replication is \*

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

append() adds an item to the end of a list, whereas . insert() inserts and item in a specified position in the list.

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

Methods are remove(), pop() and clear()

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

both are sequences

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

tuples are immutable as opposed to lists which are mutable

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

(42)

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

Using tuple() builtin function

To convert a tuple into list in Python, call list() builtin function and pass the tuple as argument to the function. list() returns a new list generated from the items of the given tuple.

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

Strings values

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

copy() create reference to original object. If you change copied object - you change the original object.  deepcopy() creates new object and does real copying of original object to new one