1. What exactly is []?

Answer: [ ] 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.)

Answer: 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: d

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

Answer: d

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

Answer: ['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: 1

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

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

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

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

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

Answer:

list concatenation operators: +

list replication operators: \*

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

Answer:

append(): add values only to the end of a list

insert(): add value anywhere in the list

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

Answer: del & remove()

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

Answer: list values & string values are typed with quote, lists and strings can be passed to len(), have indexes and slices, be used in for loops, be concatenated or replicated, and be used with the in and not in operators.

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

Answer:

|  |  |
| --- | --- |
| List | Tuple |
| Lists are mutable, they can have values added, removed, or changed | Tuples are immutable; they cannot be changed at all |
| lists use the square brackets [ ] | tuples are written using parentheses () |

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

Answer: (42, )

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

Answer: By using the tuple() and list() functions

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

Answer: They contain references to list values.

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

Answer:

copy.copy() function will do a shallow copy of a list.

copy.deepcopy() function will do a deep copy of a list.

copy.deepcopy() will duplicate any lists inside the list.