

1. What exactly is []?

Sol: 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: 'c'

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 meaning in bacon? [3.14, 11, 'cat', True]

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

Sol: list concatenation +

List replication \*

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

Sol: append() is used to add an element at end of list whereas insert is used to insert an element at particular index.



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

Sol: `del()` and `remove()` are used to remove an element from list.

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

Sol: both of them :

- A. Have indexes and can be sliced
- B. Can be used in for loop
- C. Can be concatenated or replicated

What's the difference between tuples and lists?

Sol. Adding, removing and updating of element can be done in list but not in tuple. List use `[]` and tuple uses `()`. Tuple is immutable and list is mutable.

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. Tuple to list : `list()` function

List to tuple: `tuple ()` function

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

Sol. They contain reference to list.

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

Sol. `Copy.copy()` will copy a list but `copy.deepcopy()` can copy list of list or nested list

