

1. What exactly is []?

Solution - 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.)

Solution - `spam.insert(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)]`?

Solution – 'd'

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

Solution – 'd'

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

Solution - ['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')`?

Solution - 1

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

Solution - [3.14, 'cat', 11, 'cat', True, 99]

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

Solution - [3.14, 11, 'cat', True]

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

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

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

Solution - The difference between the two methods is that . `append()` adds an item to the end of a list, whereas . `insert()` inserts an item in a specified position in the list.

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

Solution - The methods are `remove()`, `pop()` and `clear()`. It helps to remove the very first given element matching from the list. The `pop()` method removes an element from the list based on the index given. The `clear()` method will remove all the elements present in the list

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

Solution - The similarity between Lists and Strings in Python is that both are sequences having a fixed length.

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

Solution - The primary difference between tuples and lists is that tuples are immutable as opposed to lists which are mutable. Therefore, it is possible to change a list but not a tuple. The contents of a tuple cannot change once they have been created in Python due to the immutability of tuples.

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

Solution – (42,)

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

Solution - Using the tuple() built-in function

- Using the list() built-in function

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

Solution - Variables will contain references to list values rather than list values themselves. But for strings and integer values, variables simply contain the string or integer value.

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

Solution - 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