

1. What exactly is []?
Sol.) This is a list(empty).
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"` (assuming we are assigning hello as 3rd value not at 3rd index)

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.) The value will be "d".
4. What is the value of `spam[-1]`?
Sol.) The value of `spam[-1]` is 'd'.
5. What is the value of `spam[:2]`?
Sol.) It will return ['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')`?
Sol.) The value is 1.
7. How does `bacon.append(99)` change the look of the list value in bacon?
Sol.) [3.14, 'cat', 11, 'cat', True, 99]
8. How does `bacon.remove('cat')` change the look of the list in bacon?
Sol.) [3.14, 11, 'cat', 'True', 99]
9. What are the list concatenation and list replication operators?
Sol.) The list concatenation and list replication operators is + and * respectively.
10. What is difference between the list methods `append()` and `insert()`?
Sol.) `append()` function inserts a value(any type) at the end of the list and `insert()` function insert the value to a list at a specified index.
11. What are the two methods for removing items from a list?
Sol.) `del` and `remove()` are 2 methods.
12. Describe how list values and string values are identical.
Sol.) The 2 values are identical in many ways, there are many functions which can be used in both such as `len()`, indexing etc.
13. What's the difference between tuples and lists?
Sol.) Lists are mutable and tuples are immutable.

14. How do you type a tuple value that only contains the integer 42?
Sol.) `variable_name= (42,)`
15. How do you get a list value's tuple form? How do you get a tuple value's list form?
Sol.) Suppose we have a list in variable `spam`, we can get it as tuple form: `tuple(spam)`
Suppose we have a tuple in variable `spam`, we can get it as tuple form: `list(spam)`
16. Variables that "contain" list values are not necessarily lists themselves. Instead, what do they contain?
Sol.) References
17. How do you distinguish between `copy.copy()` and `copy.deepcopy()`?
Sol.) `copy.copy()` will create a shallow copy while `copy.deepcopy()` will create a deep copy.