1. What exactly is []?

=> It’s an empty list.

1. 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.)

=> spam.insert(2, 'hello')

Let's pretend the spam includes the list ['a', 'b', 'c', 'd'] for the next three queries.

1. What is the value of spam[int(int('3' \* 2) / 11)]?

=> ‘d’

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

=> ‘d’

1. 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.

This list will give an error of invalid syntax because ‘,’ is missing between 1 and 2 value and 3 and 4 value.

If consider this bacon = [3.14, 'cat', 11, 'cat', True]

1. What is the value of bacon.index('cat')?

=> 1

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

=> [3.14, 'cat', 11, 'cat', True, 99]

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

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

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

=> list concatenation operator = +, used to add lists

list replication operator = \*, used to replicate same list multiple times

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

=> append() = used to add a value at the end

Insert() = used to add a value at the desired position

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

=> pop() and remove()

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

=> if type of all the values in list is str.

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

=> tuples are immutable while list are mutable.

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

=> (42,)

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

=> if t is tuple and l is list then list( t ) is list and tuple( l ) is tuple.

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

=> they contain references of lists

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

=> if any changed made in copied object by copy.copy() then the change will reflect in original object also

While changed made in copied object by copy.deepcopy() will not reflect in original object