1. What exactly is []?

Ans:

[] is 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.)

Ans:

spam = [2, 4, 6, 8, 10]

spam[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)]?

Ans:

d

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

Ans:

d

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

Ans:

['a', 'b']

Let's pretend bacon has the list [3.14, 'cat', 11, 'cat,' True] for the next three questions.

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

Ans:

1

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

Ans:

It will append 99 at the end of the list, giving the output as below:

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

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

Ans:

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

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

Ans:

The operator for list concatenation is +, while the operator for replication is \*.

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

Ans:

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

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

Ans:

The two methods for removing items from a list are remove() and pop().

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

Ans:

Both 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.

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

Ans:

Tuples are immutable whereas lists which are mutable.  Tuples are written using parentheses, ( and ), while lists use the square brackets, [ and ].

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

Ans:

(42,)

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

Ans:

For list to tuple: tuple() and for tuple to list: list()

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

Ans:

Variables will contain references to list values rather than list values themselves.

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

Ans:

The copy() returns a shallow copy of the list, and deepcopy() returns a deep copy of the list.