1. What exactly is []?

Empty list in python.

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[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.

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

Index is : 1

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

The above line of code appends 99 at the end of the list. And now the list looks like

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

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

The above line of code remove the first occurrence of the word ‘cat’ from the list and now the list looks like

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

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

List concatenation operators are : +, \*

List Replication operators is : \*

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

Append() , appends the given element at the end of the list always.

Whereas insert () requires the index position of the list where we want to insert the element.

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

List.remove(“element to be removes”)

List.pop([index of the element to be popped out])

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

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?

Tuples are immutable and lists are mutual.

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

42,

Note: the trailing comma is necessary here

1. How do you get a list value's tuple form? How do you get a tuple value's list form?
2. Tuple(list )
3. List(tuple)
4. Variables that "contain" list values are not necessarily lists themselves. Instead, what do they contain?

They contain references to list values.

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

The copy.copy() function will do a shallow copy of a list, while the copy.deepcopy() function will do a deep copy of a list. That is, only copy.deepcopy() will duplicate any lists inside the list.