1. What exactly is []?

[] index bracket is used to define for list content in python.

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.)

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

Spam[2]=’hello’

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

Spam[3]🡪’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')?

Although list is not properly written

But if it will correct as bacon=[3.14, 'cat', 11, 'cat' ,True]

Then bacon.index('cat') return 1 (as cat index is 1)

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

New list bacon=[3.14, 'cat' 11, 'cat' ,True,99]🡪append at last

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

bacon=[3.14, 11, 'cat' ,True,99]🡪remove first cat found

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

In python programming, operator for list concatenation is +, and for list replication \*.

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

The only difference between append() and insert() is that insert function allows us to add a specific element at a specified index of the list unlike append() where we can add the element only at end of the list.

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

Remove()

Pop()

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

The similarity between Lists and Strings in Python is that both are sequences. The differences between them are that firstly, Lists are mutable but Strings are immutable. Secondly, elements of a list can be of different types whereas a String only contains characters that are all of String type.

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

List-> It is mutable.

Operations like insertion and deletion are better performed.

Consumes more memory.

Many built-in methods are available.

Tuple:

It is immutable

Elements can be accessed better.

Consumes less memory.

Does not have many built-in methods.

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

T=(42,)

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

Li=[(2,’name’),(3,’kom’)…

Tu=tuple(Li)

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

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.

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

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. Changing new deepcopied object doesn't affect original object.