1. What exactly is []?

The empty list value, which is a list value that contains no items. This is similar to how '' is the empty string value.

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)]?

Int(33)/11

Spam[int(3)]

Spam[3]=d

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

d(negative index counts from the end)

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')?

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]

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

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

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

append() adds an item to the end of a list, whereas . insert() inserts an item in a specified position in the list.

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

 pop(<index>) – It is used to remove item of list using index. -remove(<value> – It is used to remove item of list using value.

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

 a string's length is the number of characters in the string; a list's length is the number of items in the list. Each character in a string as well as each item in a list has a position, also called an index.

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

1.Tuples are immutable while lists are mutable.

2.Tuples consume less memory while lists consumes more memory.

3.Tuple() and List[].

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 you want to convert a Python list to a tuple, you can use the tuple() function to pass the full list as an argument, and it will return the tuple data type as an output.

To convert a tuple into list in Python, call list() builtin function and pass the tuple as argument to the function. list() returns a new list generated from the items of the given tuple.

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

 list variables don't actually contain lists themselves. Instead, they contain something called a reference to a list.

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.