1. What exactly is []?

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[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')?

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 means addition of two or more lists. + operator is used to concatenate list.

List replication means replicating same list n number of times. \* operator is used to replicate list.

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

Append() - adds element to the end of the list.

Insert() – adds specific value at specified position.

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

pop() – bydefault will removes last item from list. But we can remove any element by entering index number.

remove() – removes first given element matching from list.

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

Both string values and list values have lengths. String length is number of characters and list length is number of items.

Each character and item has a position, known as index.

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

Tuples are immutable whereas lists are mutable

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

a = (42,)

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

tuple() – gives list values in tuple form

list() – gives tuple values in list form

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

String or integer value.

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

copy.copy() creates reference to original object. Any change in original data will reflect in copied data.

copy.deepcopy() – It creates new object. And old & new objects are independent. If any change in original data will not reflect in new data.