1. What exactly is []?

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

Ans: spam[2] = ‘hello’ (notice that the third value in a list is at index 2 because the first index is 0.)

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

Ans: ‘d’ (note that ‘3’\*2 is the string ‘33’, which is passed to int() before being divided by 11. this eventually evaluates to 3. expressions can be used whenever values are used.)

4. What is the value of spam[-1]? Ans: ‘d’ (negative indexes count from the end.)

5. 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.

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

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

Ans: [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,]

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

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

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

Ans: while append() will add values only to the end of a list , insert() can add them anywhere in list.

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

Ans: The methods are remove(), pop() and clear(). it helps to remove the very first given element matching from the list. The pop() method removes an element from the list based on index given.

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

Ans: list and string both are used to store value/data and both are sequence, list are mutable and string are immutable.

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

Ans: lists and tuples store one or more objects or values in a specific order. The objects stored in a list or tuple can be of any type including the nothing type defined by the none keyword.

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

Ans: with parenthesis for example apple =(‘42’)

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

Ans: you could place a comma after the value inside the parenthesis for retrieving.

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

Ans: references bit of data

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

Ans: copy.copy() makes duplicate copies and deepcopy() copies the inner list as well thought both similar.