1. What exactly is []?

Ans: [] is a list: A mutable collection of values, usually of the same type.

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 contains the list [‘a’, ‘b’, ‘c’, ‘d’].

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’

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

Ans: ‘d’

1. What is the value of spam[:2]?

**Let’s pretend bacon has the list [3.14, ‘cat,’ 11, ‘cat.’ True] for the next three questions**.

Ans: [‘a’, ‘b’]

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

Ans: 1

1. 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: For the list concatenation is +

For the list replication is \*

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

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

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

Ans: remove() helps to remove the very first given element matching from the list.

Clear() this will remove all the element present in the list.

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

Ans: List is a sequential collection, where each values is identified by an index. The values that make up a list are called its elements. It is similar to string.

Whereas String is a sequential collection of characters.

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

Ans: Tuples are immutable whereas Lists are mutable.

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

Ans: (42,)

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

Ans: By using list() and tuples() methods.

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

Ans: Variables will contain references to list values rather that list values.

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

Ans: copy() creates reference to original objects if we change copied objects user have to change the original objects. Whereac decopy() creates new objects and does real copying of the original objects to new one.