1. What exactly is []?

Ans: [] is used to represent an empty string.

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.)

Ans: we can assign it using:

Spam[2]=’hello’

This will give an output:

[2,4,’hello’,8,10]

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)]?

Ans: The value of spam[int(int(‘3’\*2)//11] is spam[3], therefore the value is ‘d’.

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

Ans: ‘d’ is the value of spam[-1].

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

Ans: The value of spam[:2] is [‘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')?

Ans: The value of bacon.index(‘cat’) is 1.

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

Ans: The append method adds a new element in the end of the list, bacon.append(99) will give the output ->[3.14, 'cat,' 11, 'cat,' True,99].

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

Ans: bacon.remove(‘cat’) remove the element ‘cat’ from the list. The output will be:[3.14, 11, 'cat', True, 99].

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

Ans: The list concatenation operator is ‘+’ and the list replication operator is ‘\*’.

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

Ans: append() method adds elements only to the end of the list ,whereas insert() method can be used to insert a element anywhere in the list.

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

Ans: The del statement and the remove() method are two ways to remove values from a list

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

Ans:Both strings and lists can have indexes and be sliced, they can be used in for loops, they both are sequences.

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

Ans:Lists are mutable whereas tuples are immutable. List uses square brackets [] , while tuples uses parenthesis ().

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

Ans: We can write it as: (42,)

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

Ans: We can use a list() and tuple() functions to change a tuple into a list and vice versa.

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

Ans: They contain references to list values.

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

Ans: The copy.copy() will create a shallow copy of a list, while the copy.deepcopy() will duplicate any lists inside the list also.