1. What exactly is []?

* In python this bracket is denoted the empty list that does not contain any values

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 = [2,4,6,8,10]

Spam.insert(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)]?

* The value will be 'd'

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

* The value will be d

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

* The value will be c

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')?

* The value will b 1.

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

* The value of the new list [3.14, 'cat,' 11, 'cat,' True,99]

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

* The value of the new list [3.14, 11, True,99]

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

* The + operator joins or concat the two list. And The \* operator replicates the elements in the list.

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

The difference between append and insert method in python list is append method can be use for adding new element in the list only but by using insert we can add as well as can modify already occupied position.

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

* We can remove an item from the list by passing the value of the item to be deleted as the parameter to remove () function. Also, we can remove the element at the specified index and get the value of that element using pop ().

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

* The main similarity between Strings and List is that in Python both are sequences. A string is a character's sequence between single or double quotations. A list is an item sequence in which each item could be anything such as a float, an integer, a string, etc.

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

* The primary difference between tuples and lists is that tuples are immutable as opposed to lists which are mutable. Therefore, it is possible to change a list but not a tuple.

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

* To create single tuple value that will contains only one value we have to use he trailing comma for an example tuple value that only contains the integer 42 = (42,) (The trailing comma is mandatory.)

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

* In python A tuple can consist of elements of multiple data types at the same time. Therefore we can create a tuple by placing all elements inside the parentheses(()) separated by commas.
* We can convert a tuple into list in Python using list(sequence),

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

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

* Shallow copy() create reference to original object. If you change copied object - you change the original object. Whereas deepcopy() creates new object and does real copying of original object to new one.