1. What exactly is []?

**Ans:** These two square brackets are used to tell given variable is of list datatype.

2. 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:**

1. spam.insert(2, ‘hello’)
2. 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]?

**Ans:** [‘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:** Given syntax is invalid. Correct syntax is [3.14, 'cat’, 11, 'cat’, True]

Bacon.indec(‘cat’)= 2

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, 99]

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

**Ans:** list concatenation = + and \*

list replication operators = \*=

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

**Ans:** append() inserts a new value at the end whereas insert() inserts a value at a particular index. Syntax is also different.

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

**Ans:** remove() and del

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

**Ans:** List and string are both sequence.

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

**Ans:** Tuples are fixed collection of elements i.e you cannot add new element in it. List is the collection of the element where new elements can be added.

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

**Ans:**  tuple\_name = (42,) // Add comma after the element so that python will identify it as a tuple.

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

**Ans:** list\_name = tuple(list\_name)

tuple\_name = list(tuple\_name)

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

**Ans:**  It contains reference to list values than list values themselves.

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

**Ans:** copy.copy() creates a copy of a reference object. If you change the copied object you change the reference object.

**C**copy.deecopy() - creates new object and does real copying of original object to new one. Changing new deepcopied object doesn't affect original object.