1. What exactly is []?

An empty list

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]='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)]?

Anwer is **d**

‘3’\*2=’33’

Int(‘33’)=33

Int(33/11) =3

Spam[3]=d

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

d

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

[‘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')?

1

Returns the index of first occurence

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

[3.14, 'cat', 11, 'cat', True,99]

Added 99 to the list

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

[3.14, 11, 'cat', True,99]

Removed first occurence

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

+ is concatenation operator and \* is replication operator

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

Append adds the items to the end of the list, while insert is used to insert item at a specific index.

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

Remove(item)- to remove first occurrence of element/item

Pop(index)- to remove element from specifies index

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

Indices are maintained for both

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

List is mutable – []

Tuples are immutable – ()

Elements can be added/removed to/from list.

Tuple elements can only be traversed.

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

Mytuple=(42,)

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

mylist=list(Mytuple) #tuple to list

mytp=tuple(bacon) # list to tuple

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

Reference to values

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

In copy.copy() or shallow copy, both the lists share the common object, hence changes made in one will reflect in other.

In copy.deepcopy() or deep copy, values are copies to a new object so any changes made to one list will not impact the other.