**1. What exactly is []?**

[] is an empty list.

**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.)**

Spam[2] = ‘hello’

**Let's pretend the spam includes the list ['a', 'b', 'c', 'd'] for the next three queries.**

**3. What is the value of spam[int(int('3' \* 2) / 11)]?**

spam[3] = ‘d’

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

Spam[-1] = ‘d’

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

spam[:2] = ‘a’,’b’

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

**6. What is the value of bacon.index('cat')?**

bacon.index(‘cat’) = 1

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

bacon.append(99) will add value 99 at the end of the list bacon then bacon = [3.14, 'cat,' 11, 'cat,' True,99]

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

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

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

‘+’ is the list concatenation operator which concatenate two lists

‘\*’ is the list replication operator which replicate the items inside the list to a new list

e.g a = [1,2] b = [3,4]

a+b = [1,2,3,4]

a\*2 = [1,2,1,2] replication return a new list, don’t change the original list

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

append(object) has only one attribute which add the item to the end of the list

insert(index,object) has two attributes which add the item to the list at given index.

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

a**.**pop**(**index**=-1)**

a**.**remove**(**value**)**

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

Slicing of list and string values are identical.

Lst = [1,2,3,4,5] Strg = ‘bacon’

Index in list and strg starts with 0 and last item can be get with index –1.

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

Both tuple and list are sequence data types in python which can store any data type.

The only difference between them is that list is mutable while tuple is an immutable item.

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

tuple(42)

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

A= [1,2,3,4] B = (9,8,7,6)

Tuple form of list A = tuple(A)

List form of tuple B = list(B)

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

Hashed items

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

copy.copy(*x*)

Return a shallow copy of *x*.

copy.deepcopy(*x*[, *memo*])

Return a deep copy of *x*.

If we make some changes in shallow copied item then this change will also reflect in the original item while this is not true for deepcoppied items.