1. What exactly is []?

Ans:- Empty List

The empty list value, which is a list value that contains no items. This is similar to how '' is the empty string value.

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

Ans

spam.insert(2,"hello")

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

Spam = ['a', 'b', 'c', 'd']

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

Ans) d

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

Ans) d

5. 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.

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

Ans

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

bacon.index('cat')

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

bacon.append(99)

Ans

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

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

Ans) [3.14, 11, True, 99]

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

Ans(The operator for list concatenation is +, and the operator for replication is \*)

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

Ans ) in append the values are added at end,in Insert the values are added in specifi index

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

Ans)Remove and del statement

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

Ans)spam =['a', 'b', 'c', 'd']

al = "abcd"

spam = []

for i in al:

spam.append(i)

print(i)

Both lists and strings can be passed to len(), have indexes and slices, be used in for loops, be concatenated or replicated, and be used with the in and not in operators

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

Ans) Tuples are immutable (),List are mutable able acces the insert,append.etc

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

ans) (42,)

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

list() >> []

tuple() >> ()

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

Ans contain references of list values

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

The copy.copy() function will do a shallow copy of a list, while the copy.deepcopy() function will do a deep copy of a list. That is, only copy.deepcopy() will duplicate any lists inside the list.

li1 = [1,2,[2,3],6]

li2=copy.copy(li1)

li2 ,id(li2)

([1, 2, [2, 3], 6], 2851875738560)

li3=copy.deepcopy(li1)

li3,id(li3)

([1, 2, [2, 3], 6], 2851875724160)