1. What exactly is []?

Ans.1

[] is an empty list in python.

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.)

Ans.2

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

**Spam[2]=’hello’**

#now run spam

Output:

[2,4,’hello’,8,10]

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)]?

Ans.3

Spam=[a,b,c,d]

int(‘3’\*2) = 33

int(int(‘3’\*2)/11) = 3

spam[3]=d

because we define spam=[a,b,c,d] means index of 3 is d. so answer is d.

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

Ans.4

d

because negative index start from last value of list.

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

Ans.5

[‘a’,’b’]

Because above statement says that count from o to 2 and in list index 2 is not consider.it starts from 0 & 1.

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.6

1

Because in list index start from 0 and consider 1st value if same values occur more than 1 time.

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

Ans.7

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

In List add value at the end of list by default, if not define its position into list.

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

Ans.8

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

Because in list index start from 0 and consider 1st value if same values occur more than 1 time.

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

Ans.9

List concatenation operator: + (plus)

List replication operator: \* (multiplication)

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

Ans.10

The append() method appends an element to the end of the list

The insert() method inserts an element to the list at the specified index.

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

Ans.11

1.)Using remove() method

2.) Using del operator

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

Ans.12

The similarity between Lists and Strings in Python is that both are sequences. The differences between them are that firstly**, Lists are mutable** but **Strings are immutable**. Secondly, elements of a **list can be of different types** whereas a **String only contains characters** that are all of String type.

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

Ans.13

Tuples are immutable while list are mutable. Means tuples cannot be changed while list can be modified.

Tuple require () , while list require [].

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

Ans.14

(42,)

Trailing comma is mandatory.

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

Ans.15

Tuple()

List()

Functions respectively

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

Ans.16

They contain references to list values.

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

Ans.17

copy() create reference to original object. If you change copied object - you change the original object. . deepcopy() creates new object and does real copying of original object to new one. Changing new deepcopied object doesn't affect original object.