1. What exactly is []?

Ans:- [] is an empty string.

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.)

Ans:- 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)]?

Ans:- 4

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

Ans:- d

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

Ans:- 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')?

Ans:- bacon[1]

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

Ans:- bacon.append(99):- it adds 99 at the end of list.

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

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

Ans:- It removes the first cat

Eg:- [3.14, 11, 'cat', True]

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

Ans:- The operators used to concatenate is ‘+’ and operator used to replicate is ‘\*’.

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

Ans:- Append will add value to the last of the list whereas insert can add value anywhere in list.

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

Ans:- The two methods used in removing items from list are remove(), pop().

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

Ans:- List and string are identical in many ways for eg :-

* They both are sequences
* They both have lengths
* They both have positions

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

Ans:-

* + Tuples are mutable and list are not mutable
  + Tuples are faster and list are slower comparatively.
  + List have dymanic whereas tuple have static characters.

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

Ans:- The tuple that contain only one value 42 is(42,)

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

Ans:- We can convert list value’s to tuple form by using tuple() built in function.We can convert tuple value’s to list form by using map() function or zip() function

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

Ans:- Refernce to list values.

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

Ans:- copy constructs a new compound object and then inserts references into it to the objects found in the original.

A deep copy constructs a new compound object and then, recursively, inserts copies into it of the objects found in the original.