1. What exactly is []?

It is the empty list .which contains no values or items.

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)]?

‘d’

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

‘d’

5. 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.

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

1

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

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

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

[3.14, 11, 'cat', True]

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

List concatenation operator = +

List replication operator = \*

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

append() = It will add values only to the end of a list.

insert() = It can add them anywhere in the list.

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

The del statement and the remove() list method are two methods to remove items from a list.

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

Strings and lists are similar, but they are not same and many people don't know the main difference between a string and a list in python. One simple difference between strings and lists is that lists can any type of data i.e. integers, characters, strings etc, while strings can only hold a set of characters.

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

List :-they are mutable.they can have values added, removed, or changed. lists use the square brackets[ ].

Tuples:- they are immutable. they cannot be changed at all. Also, tuples are written using parentheses( )

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

(42,)

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

tuple() and list()

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

They contain references to list values.

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

copy.copy() = It will do a shallow copy of a list

copy.deepcopy() = It will do a deep copy of a list and only this function will duplicate any lists inside the list.