1. What exactly is []?

- square braces helps in the definition of list. If no parameter is there inside square brackets then it is basically a empty list 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.)

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

- spam[2]=”hello”

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?

- it adds 99 at the end of the list, i.e- the last member.

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

- It changed the look as given   
[3.14, 11, 'cat', True, 99]

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

- ‘+’ is called as list concatenation operator which appends or joins two lists whereas ‘\*’ is called as list repetition operator which replicates the elements in the given list.

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

- The difference between append and insert function is that in append function we can add a desired element only at the end of the list whereas in insert function we can add a desired element at a desired index of the list.

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

-‘remove’ and ‘del’ are the two methods for removing items from a list.

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

- We can say that the list values and string values are identical in the sense that both the entities contains collection of characters in a defined manner. The only difference in the collection of characters is that in case of list values, we can have elements of different data types whereas in case of a string, we can’t have elements of different data types. Also, list and string’s values can be traversed through indexes and len() can also be implemented upon them.

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

-The significant difference between tuples and lists is that tuples() are immutable in nature, i.e- once defined their values can’t be altered whereas in case of lists[] the values can be altered as required.

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?

- We can use the functions tuple() and list() to get a list value's tuple form and to get a tuple value's list form respectively.

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

- Reference to the list values.

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

- given a scenario where there is a list inside of a list, there copy.deepcopy() will be able to fetch/duplicate the lists inside of the list whereas it is not possible in case of copy.copy().