1. What exactly is []?

Ans: blank list data structure.

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:spam.insert(2,"spam")

3rd value =2nd index

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:'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:1

Assuming the inverted commas are placed correctly as for cat it is mispalced.

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

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

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

Ans: The first appearance of cat will get removed

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

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

Ans: for concatenation + operator is used

for replication \* is used

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

Ans: append will insert the data at the end of the list ,insert will take 2 args ,1st is index and 2nd is value,it will insert data at that particular index.

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

Ans: remove method will remove value which is present anywhere in list,pop method will remove the data from the end of the list.

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

Ans:Both can be accessed via indexing.

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

Ans:tuples are immutable whereas list are mutalbe.

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

Ans:x=(42,) if comma is not there then it would be an int.

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

Ans:list

x=[1,2,3]

list to tuple

tuple(x)

tuple to list

list(tuple(x))

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

Ans: They could contain int,str,bool,float,complex or any other data type depending upon the data that is stored.

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

Ans: in copy.copy() only the refrence address is stored in the new object.but in deep.copy() all the data is being stored in new object.