1. What exactly is []?

Ans. List.

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

spam[2]='hello'

spam

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. 8

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

Ans. 10.

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

Ans. [2,4]

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

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 in bacon?

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

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

Ans. list concatenation is done by ‘+’operator and repetition Is done by ‘\*’ operator.

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

Ans. append will add the operator at the end and insert can add operator at the index level.

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

Ans. remove,pop and del operator.

Remove will use to remove the values given its values.

Pop remove the items of the specific index.

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

Ans. List and string both are used to store value /data and both are sequence.

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

Ans. Lists are mutable and tuple are inmutable.

List symbol =[],tuple= ().

List has several built-in methods but tuple doesn’t have built in methods.

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

Ans t=[42]

a=tuple(t)

type(a)

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

Ans. using the list function we will get list value's tuple form and the tuple function we will get tuple value's list form.

a=(1,2,3)

b=list(a)

c=[1,2,3,4]

d=tuple(c)

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

Ans. It contains Lists and String values.

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

Ans. if we use copy to keep the data then if we change in original data it will effect the new data also.

But this is not in the case of deep copy. It create the separate response to it.