1. What exactly is []?

Resembles a 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.)

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

spam[3]='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]?

Let's pretend bacon has the list [3.14, 'cat,' 11, 'cat,' True] for the next three questions.

bacon = [3.14, 'cat', 11, 'cat', True]

bacon[:2]

[3.14, 'cat']

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 will combine 2 list to create a single list. List replication means elements in the list is duplicated as many times as needed.

list3 = list1 + list2

list2 = (list1)\*3

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

Append adds a single element to the end of the list. Insert adds a single element to a specified position in the list.

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

Del list1[1] and list1.remove[‘orange’]

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

If the list has all the elements in string datatype then both are identical or if the list has the same elements as in the string.

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

List is mutable but tuples are not.

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

mytup =(42)

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

list1= [1,2,3]

tup= (list1)

type(tup) Converting List to tuple

aTuple = (123, 'xyz', 'zara', 'abc')

l= list(aTuple)

type(l) Converting tuple to list.

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

Variables will contain references to list values rather than list values themselves. But for strings and integer values, variables simply contain the string or integer value.

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

In case od deep copy there is no link with the original dataset where any changes made will not reflect on the original dataset but its vice versa with copy().