1. What exactly is []?

[] is empty 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.)

spam.insert(2,'hello' )

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

Spam = [2, 4, 'hello', 6, 8, 10, ['a', 'b', 'c', 'd']]

3. What is the value of spam[int(int('3' \* 2) / 11)]? 🡪

6

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

['a', 'b', 'c', 'd']

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

[2, 4]

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]

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?

99 is added to the end of the list

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

‘cat’ at index 1 is removed and the other ‘cat’ is retained

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

Concatenation operator = ‘+’

replication operators = ‘\*’

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

append() = adds element at the end of the list

insert() = inserts new element at a specified index

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

pop() and remove() methods

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

The values in string variable is stored with indexation, even the values in the list are stored with indexes. So, they are identical

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

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

t=(42,)

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

L=[23,523,’g’,’ewr’,3,5.6]

list value's tuple form:

T=tuple(L)

tuple value's list form:

S=list(T)

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

Tuples, set, dictionary

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

In shallow copy(copy.copy()) a new object is created with indexes pointing to the values in the original object.

In deep copy(copy.deepcopy()) a new object is created with values copied from the original object and inserted at the corresponding indexes in the new object.