1. What exactly is []?

* It is an 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.)

* If we want to replace the third value: spam[2] = 'Hello'
* Else spam.insert(2,'Hello')

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)]?

* ‘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?

* [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, 99]

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

* Concatenation (+) and Repetition (\*)

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

* The difference is that with append, you just add a new entry at the end of the list. With insert(position, new\_entry) you can create a new entry exactly in the position you want

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

* remove() and pop()

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

* Lists are similar to strings, which are ordered collections of characters, except that the elements of a list can have any type and for any one list, the items can be of different types

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

* Lists are mutable while tuples are immutable. A list has a variable size while a tuple has a fixed size

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?

* Using list() and tupple() method

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

* It can contain Integers, Strings, as well as Objects

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

* A shallow copy constructs a new compound object and then (to the extent possible) inserts references into it to the objects found in the original
* A deep copy constructs a new compound object and then, recursively, inserts copies into it of the objects found in the original