1. What exactly is []? list notation

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

spam.insert(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)]? ‘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')? **ValueError**: 'cat' is not in list

However, bacon.index('cat,') gives index 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?**ValueError**: list.remove(x): x not in list

However, bacon.remove('cat,') generates [3.14, 11, 'cat,', True]; removed cat from 1st occurrence only

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

list concatenation: joins lists using ‘+’ operator.

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

* append adds element at end of the list
* insert adds element at specified index of the list

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

pop() removes last element of the list, clear() removes all elements, remove() removes element by index

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

slicing of elements is similar for both list and string values, using the index values

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

* tuple notation (), tuple is not mutable
* list notation [], list is mutable

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?

* tuple(list)
* list(tuple)

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

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

copy creates another reference of each element of variable

where as deepcopy deepcopies each element