1. What exactly is []?

the square brackets, used to denote list in python.

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]=’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 (gives the index of the first occurrence of the item passed to it)

7. How does bacon.append(99) change the look of the list value in bacon?

it appends 99 as the last item in the list ([3.14, 'cat,' 11, 'cat,' True,99])

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

It removes the first occurrence of ‘cat’ in the list ([3.14, 11, 'cat,' True])

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

+for concatenation and \* for replication.

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

append adds the item passed to the end of the list , while using the insert() we can add the element at the desired location into the list .

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

remove(), pop()

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

both of them have a length characteristic about them and each character in the string and each item in the list have some index value associated with it as well.

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

tuples are immutable while lists are mutable.

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

temptuple=(42)

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

temptuple=tuple(list\_name)

templist=list(tuple\_name)

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

variables will contain reference to the list values , not the list value themselves.

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

copy() creates reference to original object. if you change copied object, you change the original object. deepcopy() creates new object and does real copy of original object to the new one.