**1. What exactly is []?**

Ans. [] 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.)**

**Ans.** spam[2] = “hello”

Output: [2,4, “hello”, 8, 10]

**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)]?**

**Ans.** ‘d’

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

**Ans.** ‘d’

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

**Ans.** [‘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')?**

**Ans.** 1

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

**Ans.** bacon = [3.14, 'cat', 11, 'cat', True, 99]

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

**Ans.** bacon = [3.14, 11, 'cat', True, 99]

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

**Ans.** Operator for list concatenation is ‘+’, while for list replication is ‘\*’.

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

**Ans.** appen() add values at the end only while insert() can add anywhere specified in the list.

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

**Ans.** del statement and remove()

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

**Ans.** List values and string values are identical as follows:

1. Both can be passed to len()
2. Have indexes & slice
3. Both be used in for loops
4. Both of them can be concatenated and replicated
5. Both can be used with the in and not in operators.

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

**Ans.** List are mutable objects means they can have values added, removed or change whereas Tuples are immutable, meaning they cannot be changed at all. List are written using square brackets [] and tuples uses parentheses ().

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

**Ans.**  t = (42,)

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

**Ans.**

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

**Ans.** They contain references to list values.

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

**Ans.** copy.copy() : Do a shallow copy of list

copy.deepcopy() : do deep copy of a list and only it will duplicate any lists inside the list.