1. What exactly 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.)

**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)]?



**Spam[3]=’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?

**The list concatenation operator is +**

**The list replication operator is \***

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

**The append( )inserts an element into the specified list at the very end.**

**The insert() inserts the specified element at a specific location into a list.**

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

**list.remove()**

**list.pop()**

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

**A list is a sequential collection of data similarly string is a sequential collection of characters. List values and strings are identical as they are indexed.**

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

**Lists are mutable whereas tuples are immutable.**

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

T=(42,)

T=42,

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

**Eg: list=[1,2,3,4]**

**List values tuple form: tuple(list)**

**tuple=(1,2,3,4)**

**tuple values list form: list(tuple)**

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

**They contain references to the list value**

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

**In copy.copy() module also called as a shallow copy, any changes made to the copied object reflects in the original object.**

**In copy.deepcopy() module also called as deep copy, any changes made to the copied object does not reflect in the original object.**