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

**A). ‘[]’ is a open and closed braces used to denote as a 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.)**

**Let's pretend the spam includes the list** **['a', 'b', 'c', 'd'] for the next three queries.**

**A). spam.insert(2, ‘hello’)**

**3. What is the value of** **spam[int(int('3' \* 2) / 11)]?**

**A). spam=['a', 'b', 'c', 'd']**

**spam[int(int('3' \* 2) / 11)]**

**o/p: ‘c’**

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

**A). ‘d’**

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

**A). [‘a’,’b’,’c’]**

**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')?**

**A). 1**

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

**A). [3.14, 'cat,' 11, 'cat,' True,99]**

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

**A). [3.14, 11, 'cat', True, 99]**

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

**A) Concatenation is denoted by (+) symbol, supported by only sequence and between same data types only like Strings, List, tuples.**

**Ex: l=[1,2,3], l2=[5,3]**

**L3=l+l2**

**Replication is denoted \* symbol and it makes multiple copies of that particular object it combines them. Supported in both mutable and immutable object. But if we use \* symbol for numeric values simply it will perform Arithematic multiplication operation.**

**Ex: “ramu\* 2; o/p: ramuramu**

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

**A). Append() will add the element or list at the last index of the list. Where as insert() will add element at mentioned index.**

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

**A). remove() and pop() are methods used to remove element.**

**Remove() wil remove the element by value and pop() will remove by index by default last index is the default.**

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

**A).Both are sequence datatype and can able to iterate list and String by using it’s index.**

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

**A). Tuples are immutable , denoted by () and lists are mutable , denoted by [].**

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

**A). tuple([42])**

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

**A).listvalue’s tuple: ([2,3,5],[3,6],[‘s’,3])**

**Tuplevalue’s list: [(3,5,2),(3,2)]**

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

**A). Variables will contain reference to the list values rather than the list values themselves. But for string and integers variables will contains the string or integer value.**

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

**A). copy.copy(): It is a shallow copy means it copies a reference of the object into new object. If any changes made on original variable value then the change reflects in the newly created copied variable.**

**copy.deepcopy(): It is a deep copy it will create new object and copies whole data from the original variable. Then the original and newly created copied item both are independent.**