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

**Ans:** [] is closed brackets which is a used to define 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.)**

**Ans:** By using below code :

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

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 :**Inside snipet of code will give us a value of 3 and then we execute spam[3], then it will return ‘d’ as output.

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

**Ans :** It will return ‘d’.

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

**Ans :** It will return [‘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 :** It will return 1.

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

**Ans:** It will give us output as ['3.14', 'cat', '11', 'cat', 'True', 99]

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

**Ans :** It will remove first occurrence of ‘cat’ and return us output of ['3.14', '11', 'cat', 'True', 99]

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

**Ans :** The operator sfor list concatenation is +, while the operator for replication is \*.

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

**Ans : Append**  will just add the given argument in end of the list whereas **Insert** wil add the new item at specific location against the index number you have provided.

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

**Ans :** The two methods of removing an item from the list are: remove() and pop().

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

**Ans : list values and string values are identical because**

* Both strings and lists have lengths.
* Each character in a string as well as each item in a list has a position, also called an index.

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

**Ans: Tuples:**

* Tuples are enclosed with circular brackets().
* Tuples are immutable.

**Lists**

* Lists are enclosed with square brackets [].
* List are mutable, indexable.

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

**Ans :** tuple = (42,).

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

**Ans:** we get a list value's tuple form by using tuple with the list like : tuple(X)and tuple value's list form by using list(X).

**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 :** The copy.copy() function will do a shallow copy of a list, while the copy.deepcopy() function will do a deep copy of a list. That is, only copy.deepcopy() will duplicate any lists inside the list.