1. What exactly is []?

Ans🡪 This is empty list. We can append a element in it.

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.insert(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)]?

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 🡪 [3.14, 'cat', 11, 'cat’, True,99]

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

Ans 🡪 [3.14, 11, ,’cat’,True,99]

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

Ans 🡪 list concatenation is the concating the two more list it means list are merge into into single list.

Replication is coping a data from list and when we required the duplicate data of list for some utilities then for that purpose replication of element is done in list it based on the requirement.

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

Ans 🡪 list methods append() is used when we have to add an element at end of list but if we have to add element at specific position then for that purpose we have to use insert() method.

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

Ans 🡪 Two method for removing items from a list is remove() and pop() but in remove() method we have to give the item value of list which has to delete and pop index value has to give if the index value not given then by default it will delete last index value.

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

Ans 🡪 similarity between list and string values is both are sequence string is character sequence and list is item sequence which can be float , integer, and string etc.

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

Ans 🡪 Lists are mutable and tuples are immutable. List are represent with box bracket [ ] and tuple are represent with round bracket ().

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

Ans 🡪 tuple1=(42,)

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

Ans 🡪 we can direct make list value into tuple form by writing list variable in tuple() for example

L=[1,3,3,43,23]

T=tuple(L)

For making tuple values into list there various ways by iterating or direct putting the tuple variable to list() method.

t=(134,24,42,23)

L=list(t)

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

Ans 🡪 They contain references to lists values

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

Ans 🡪 copy.copy() is called shallow copy in this copy when new object we created is not recursively copied element and if any changes made in this object it will reflect to original object .

copy.deepcopy() is called deep copy of object In this way of copy a object it will recursively copied element and if any changes made in this object it will does not affect the original object.