**1. What is []?**

Ans. It is blank list

**2. How would you assign the value 'hello' as the third value in a list stored in a variable named spam? (Assume spam contains [2, 4, 6, 8, 10].)**

Ans. spam[2]='hello'

**For the following three questions, let’s say spam contains the list ['a', 'b', 'c', 'd'].**

**3. What does spam[int(int('3' \* 2) // 11)] evaluate to?**

Ans. spam[3]= 'd'

**4. What does spam[-1] evaluate to?**

Ans. 'd'

**5. What does spam[:2] evaluate to?**

Ans. ['a','b']

**For the following three questions, let’s say bacon contains the list [3.14, 'cat', 11, 'cat', True].**

**6. What does bacon.index('cat') evaluate to?**

Ans. 1. list.index() function return the very first index position in the given parenthesis.

**7. What does bacon.append(99) make the list value in bacon look like?**

Ans. It will add the value at the end. [3.14, 'cat', 11, 'cat', True,99]

**8. What does bacon.remove('cat') make the list value in bacon look like?**

Ans. It will permanentaly delete the respective character which encounter at thevery first satge

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

Ans. list concatenation: + list replication: \*

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

Ans. append(): It will add the whole data whether it is a int or string or list or tuple, etc. It will not prsed the data extend.(): It will parse the data and add those into the older list. Eg: l=[1,2,3,4] l.append(1) o/p: [1,2,3,4,[1,1,1]]

l.extend(l)

o/p: [1,2,3,4,1,1,1]

**11. What are two ways to remove values from a list?**

Ans. l.remove(value): This will delete the mentioned value. If value is more than one time then it will remove it by its order.

l.pop(): This will deletethe last value in the list

**12. Name a few ways that list values are similar to string values.**

Ans. By indexing we can do the string operation on the list value if it is a string. Example: b=[3.14, 'cat', 11, 'cat', True] b[1].index('t') --> 2 b[1].capitalize() --> Cat

**13. What is the difference between lists and tuples?**

Ans. List: It is mutable i.e. we can change, replace or update the value in the list. List allow these things. Tuple: It is immutable i.e. we cannot do the above things like replace, change, update the values. Tuple do not allow this. This is the main difference between List and Tuple. Fo the security reasons tuples are very important.

**14. How do you type the tuple value that has just the integer value 42 in it?**

Ans. t=(42,)

**15. How can you get the tuple form of a list value? How can you get the list form of a tuple value?**

Ans. We can use the zip function for that. Example: l1=[1,2,3] l2=[10,11,12]

z1=list(zip(l1,l2)) o/p: [(1,10),(2,11),(3,12)] list form of a tuple value

z2= ([1,10],[2,11],[3,12])

**16. Variables that “contain” list values don’t actually contain lists directly. What do they contain instead?**

Ans. Example: l=[1,2,3,4,5] Here l is a variable or we can say a object for list class. We have initialise the list with its value. Here l is refering the list values [1,2,3,4,5] It contains the reference of the list values.

**17. What is the difference between copy.copy() and copy.deepcopy()?**

Ans copy.deepcopy(): This inndicate the deep copy. With this the data of the original object,say ob1, will get copied into other object,say ob2. Whenever there is a change in the new object ob2, then it will not affect the datas of original object ob1

copy.copy(): This is opposite of the deep copy. Any change in the new object copied object will affect the datas in original object.