1. What exactly is []?

Ans1. It denotes list; my\_list=[1,2,3,4,5]

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.)

Ans2. spam=[2,4,6,8,10]

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

spam.insert(2,'hello')

print(spam)

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)]?

Ans3. ‘d’

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

Ans4. ‘d’

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

Ans5. [‘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')?

Ans6. 1

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

Ans7. [3.14, 'cat,' 11, 'cat,' True,99]

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

Ans8. [3.14, 11, 'cat,' True]

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

Ans9. For concatenation we use + and for replication we use \* operators.

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

Ans10. append() will insert the item at the last position or index but insert will put the item at the given index.

Spam=[1,2,3,4]

Spam.append(5)

Output = [1,2,3,4,5]

Spam.insert(0,5)

Output= [5,1,2,3,4]

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

Ans11. remove() and pop()

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

Ans12. List and string both have length. String and list item have index property.

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

Ans13. Tuples are defined with () and lists are defined using []. Tuples are immutable and lists are mutable.

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

Ans14. tuple= (42)

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

Ans15. my\_tuple=([1,2,3],['A','B']) & my\_list=[(1,2),(3,4)]

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

Ans16. Reference can be add.

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

Ans17. copy.copy() and copy.deepcopy() both are used to copy the lists but the major difference between them is that if you created any list using copy.copy() method and change anything in new copied list then original list also affected while in copy.deepcopy() original list will not get affected.