1. What exactly is []?  
    ANS: Empty list in python
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.append("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', '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')?  
 Ans: 1

7. How does bacon.append(99) change the look of the list value in bacon?  
 Ans: bacon = [3.14, 'cat', 11, 'cat', True, 99]

8. How does bacon.remove('cat') change the look of the list in bacon?  
 Ans:   
 bacon.remove('cat')  
 bacon = [3.14, 11, True, 99]

9. What are the list concatenation and list replication operators?  
 Ans: The operator for list concatenation is +, while the operator for replication is \*. (This is the same as for strings.)

10. What is difference between the list methods append() and insert()?  
 Ans:   
 append() :- to insert element at end of list  
 insert() :- to insert element at specific index.

11. What are the two methods for removing items from a list?  
 Ans: 1) pop(), remove()

12. Describe how list values and string values are identical.  
 Ans:   
The similarity between Lists and Strings in Python is that both are sequences.   
The differences between them are that firstly, Lists are mutable but Strings are immutable.   
Secondly, elements of a list can be of different types whereas a String only contains characters that are all of String type.

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

ANS: They are both used to store collection of data  
They are both heterogeneous data types means that you can store any kind of data type  
They are both ordered means the order in which you put the items are kept.  
They are both sequential data types so you can iterate over the items contained.  
Items of both types can be accessed by an integer index operator, provided in square brackets,

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

Ans: abc = (42)

1. How do you get a list value's tuple form? How do you get a tuple value's list form?  
   Ans:

|  |  |
| --- | --- |
| list “value's tuple” |  |
| lst1 = [10,20,30] lst2 = [50,"Python","JournalDev"] lstOfTuple = list(zip(lst1,lst2)) print(lstOfTuple) | # Python3 program to convert a  # list into a tuple  **def** convert(list):  **return** tuple(i **for** i **in** list)    # Driver function  list **=** [1, 2, 3, 4]  print(convert(list)) |

1. Variables that "contain" list values are not necessarily lists themselves. Instead, what do they contain?  
    ANS : Variables will contain references to list values rather than list values themselves. But for strings and integer values, variables simply contain the string or integer value.

17. How do you distinguish between copy.copy() and copy.deepcopy()?  
ans: **copy() create reference to original object.** **If you change copied object - you change the original object. .** **deepcopy() creates new object and does real copying of original object to new one**.