1. What exactly is []?

Ans. [] is an empty list, which is list that contain no value

1. 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 = [2,4,6,8,10]

spam[2] = ‘hello’

Let's pretend the spam includes the list ['a', 'b', 'c', 'd'] for the next three queries.

1. What is the value of spam[int(int('3' \* 2) / 11)]?

Ans. ‘d’

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

Ans. ‘d’

1. 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.

Note: there will be definition error for above list. Following answers are based on corrected list as [3.14, 'cat', 11, 'cat', True]

1. What is the value of bacon.index('cat')?

Ans. 1

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

Ans. [3.14, ’cat’, 11, ’cat’, True, 99]

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

Ans. [3.14, 11, ’cat’, True]

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

Ans.

List concatenation operator is +

List replication operator is \*

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

Ans. Append adds to the end of the list, while insert adds in front of a specified index. append can be expected to be a quick operation, insert might take a while depending on the size of the list and where you are inserting.

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

Ans del statement and remove() list method are the two ways to remove value from a list.

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

Ans. string is ordered collection of characters and list is order collection of elements of any type.

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

Ans. Elements in list are enclosed in square [] bracket while tuple is list of elements with parathesis (). Contents in tuples can’t be changed where iterations are faster while content in list can be changed in which iterations are time consuming.

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

Ans . t = (42,)

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

Ans.

* list values in tuple form using function tuple()
* tuple values in list form using function list()

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

Ans. Variables with list contains references to the list values

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

Ans.

copy.copy() is for shallow copy of a list

copy.deepcopy() is for deep copy of list to duplicate any list inside the list.