1. What exactly is []?

Ans) Empty List

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] = “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.

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?

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

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

Ans) The addition operator + is also known as a concatenation operator when applied on two python strings. the concatenation operator connects one string at the end of the other.

The multiplication operator (\*) acts as a replication operator when we have one string and one integer as operands. The replication operator produces the n number of copies of a string, and may be any integer.

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

Ans)Aappend method can be use for adding new element in the list only but by using insert we can add as well as can modify already occupied position

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

Ans)  remove(), pop()

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

Ans) Lists are similar to strings, which are ordered collections of characters, except that the elements of a list can have any type and for any one list, the items can be of different types.

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

Ans)The tuples are immutable objects and the lists are mutable. This means that tuples cannot be changed while the lists can be modified. Tuples are more memory efficient than the lists.

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

Ans) (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: tuple(list\_name)

Tuple value’s list: list( tuple\_name )

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

Ans)  References to list values

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

Ans) copy.copy() : In shallow copy, the pointer points to the same copy of objects of class.

copy.deepcopy(): in deep copy, it creates copy of each object inside of the class.