1. What exactly is []?

Empty square brackets - []. A list is created by placing element inside []. Separated by commas.

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.)

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

spam[2] = 'hello'

spam

output: [2, 4, 'hello', 8, 10]

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)]?

’d’

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

‘d’

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

[‘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')?

1 # its returns the place value for cat.

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

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

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

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

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

‘ + ‘ used to list concatenation and ‘ \* ’ for replication

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

The only different between append() and insert() is, insert() function allow us to add a specified index of the list, unlike append() can only add the element at end of the list.

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

Remove() and pop(). Remove() function helps to remove the first given element matching from the list. Pop() function helps to remove the element from the list based on the given index.

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

# Both are sequences.

# List values are listed in between the square brackets [] and values are separated by commas. Eg: sample= [‘It is a list’,’ hi’] list are mutable.

Elements of the list can be different types.

# String values are mentioned inside the quotes. Eg: sample = “This is a string value”

Strings are immutable.

String only contain characters that are all of string type.

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

Tuples are immutable.

List are mutable.

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

T = (42,)

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

The tuple() and list() respectively.

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

They contain references to list values.

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

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. Changing new deepcopied object doesn't affect original object.