1. What exactly is []?

[ ] this is the symbol of empty list in python. A list is mutable we can overwrite it and change its elements ,or change order of the elements in a 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.)

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

Spam[2]=”hello”

Spam

[2,4,’hello’,8,10]

Method 2: spam.insert(4,’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)]?

8

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

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

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

1. How does bacon.remove('cat') change the look of the list in bacon?
2. [3.14, 11, 'cat', True, 99]
3. What are the list concatenation and list replication operators?

Concatenation means adding + e.g. 2 + l1

Replication means multiplyting \*. E.g. 2\*l1

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

.append() means is use to add something or put an element in list

.insert() method use to put element on specific index

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

.pop()

.remove()

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

List values are stored in form of int,str,tuple,flot,bool in list[]

Strings values are stored in form of str() or “ “ or ‘ ‘

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

tuples are immutable while lists are mutable

once you declear a value in tuple it can not be change but in list we can rewrite or over write it also

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

T = (42)  
T

(42)

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

Tuple(L). here L is a list

List(t) here t is tuple

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

Anything inside a list will be element of the list

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

Copy.copy() will the collection in a different location and can be seen by using id()

While copy.deepcopy() is collection recursively and it only work for nested list