

Assignment 4

1) What exactly is []?

→ [] (foo-bar) is an empty list

2) In a list value store in variable called spam how could you assign the value 'hello' as the third value (Assum [2,4,6,8,10] are in spam)

→ spam[2] = "hello"

3) what is the value of spam[int(int('3' * 2)(11))]?

→ d. background:

'3' * 2 = '33'. int('33') = 33.

33 / 11 = 3. int(3) = 3.

spam[3] = d.

4) what is the value of spam[-1]?

→ negative indicates ved count from end.

5) what is the value of spam[:2]?

→ ['a', 'b']

e) let's pretend bacon has the list [3.14, 'cat', '11', 'cat', True] for next three question

→

6) what is the value of bacon.index('cat')?

→ gives value of 1st occurrence

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

→ add value at the end of list

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

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

→ Remove values of 1st occurrence. `Bacon = [3.14, 11, 'cat', True]`

9) What are the list concatenation and list-replication operators?

→ List concatenation operator: `+` and replication operator: `*`

10) What is difference between the list methods `append()` and `insert()`?

→ `append()` add values at the end of list while `insert()` add values anywhere inside list as specified indices.

11) What are the two methods for removing items from list?

→ `remove()` list method and `del` statement

12) Describe how list values and string values are identical

→ Both lists and strings can be passed to `len()`, have indexes and slices, be used in for loops, be concatenated or replicated and be used with the `in` and `not in` operators.

13) What are the differences between Tuple & List?

→ Lists are mutable, i.e. values can be added, removed. Lists use square `[]` brackets. Tuples are immutable. Tuples use parentheses `()`.

15) How do you get a list values tuple from ?
How doo you get a tuple values & list from ?
→ `tuple()` and `list()` functions respectively

16) Variables that "contain" list values are not necessarily lists themselves instead what do they contain

→ They contain reference to list values

17) distinguish betⁿ `copy.copy()` and `copy.deepcopy()`

→ The `copy.copy()` function will do shallow copy of list, while the `copy.deepcopy()` function will do a deep copy of list that is only `copy.deepcopy()` will duplicate any lists inside the list.