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State	Finished
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Time taken	37 secs
Marks	3.00/3.00
Grade	10.00 out of 10.00 (100%)

Question 1

Correct

Mark 1.00 out of 1.00

Which of the standard data types in Python have constant access time (i.e. constant time of the `[]` operation)?

- ☒ a. List ✓ Yes! It is one of the (many) virtues of this data structure.
- ☐ b. Dictionary (map).
- ☒ c. Tuple ✓ Yes. But let us also note, that tuples are generally small, only a couple of elements, hence also logarithmic and even linear access time will not be a problem.

Your answer is correct.

The correct answers are:

Tuple,

List

Question 2

Correct

Mark 1.00 out of 1.00

Assuming that the variable `lst` holds list, select what is the meaning of the expression `lst[-1]`.

- ☒ a. It is valid if the list is not empty and represents the last element of the list. ✓
- ☐ b. It is invalid, list indexing starts at 0.
- ☐ c. It is valid if the list has at least two elements and represents the second (i.e with the index `abs(-1) == 1`) element of the list

Your answer is correct.

The correct answer is:

It is valid if the list is not empty and represents the last element of the list.

Question 3

Correct

Mark 1.00 out of 1.00

Select all of the data structures listed below which are mutable.

- ☐ a. String
- ☒ b. List ✓ Yes! We can both change list elements and add/remove elements.
- ☒ c. Dictionary ✓ Yes! We can add new key:value pairs, remove them, and change the value bound to a key.
- ☐ d. Tuple

Your answer is correct.

The correct answers are:

List,

Dictionary