M Gmail

Michael Anderson <mganderson87@gmail.com>

Python Morsels Exercise: compact

2 messages

Trey Hunner <trey@truthful.technology>   Mon, Jun 4, 2018 at 10:00 AM
To: mganderson87@gmail.com

Hi! ✨

For this week's exercise I want you to write a function that accepts a sequence (a list for example) and returns a new iterable (anything you can loop over) with adjacent duplicate values removed.

For example:

```
>>> compact([1, 1, 1])
[1]
>>> compact([1, 1, 2, 2, 3, 2])
[1, 2, 3, 2]
>>> compact([])
[]
```

There are two bonuses for this exercise.

I recommend solving the exercise without the bonuses first and then attempting each bonus separately.

For the first bonus, make sure you accept *any iterable* as an argument, not just a sequence (which means you can't use index look-ups in your answer). ✔

Here's an example with a generator expression, which is a lazy iterable:

```
>>> compact(n**2 for n in [1, 2, 2])
[1, 4]
```

As a second bonus, make sure you return an iterator (for example a generator) from your compact function instead of a list. ✔

This should allow your compact function to accept infinitely long iterables (or other lazy iterables).

Automated tests for this week's exercise can be found here. You'll need to write your function in a module named compact.py next to the test file. To run the tests you'll run "python test_compact.py" and check the output for "OK". You'll see that there are some

"expected failures" (or "unexpected successes" maybe). If you'd like to do the bonus, you'll want to comment out the noted lines of code in the tests file to test them properly.

To make sure you keep getting these emails, please add trey@truthful.technology to your address book.

I'd love to know what you thought about this week's exercise. Did you really enjoy it? Were you not a fan of this one? Please feel free to respond and let me know what you think!

If you want to cancel your subscription of Python Morsels, email trey@truthful.technology with "cancel Python Morsels subscription" in the subject line. I'll cancel your subscription, no questions asked.

[12651 Monterey Cypress Way, San Diego, CA 92130](#)

Michael Anderson <mganderson87@gmail.com>   Mon, Jun 4, 2018 at 12:28 PM
To: Jeury Mejia <jeurymejia@gmail.com>

[Quoted text hidden]