[CS 11] Prac 2b – Triangular Numbers

oj.dcs.upd.edu.ph/problem/cs11prac2b

Submit solution
My submissions
Points: 100 (partial)

Time limit: 4.0s

Memory limit: 1G

Author:
kvatienza (Kevin Atienza)
Problem type

Allowed languages

~~NONE~~, py3

Cheatsheet is available here: https://oj.dcs.upd.edu.ph/cs11cheatsheet/

Problem Statement

The nnth triangular number has formula n(n+1)/2$n\ (\ n\ +\ 1\ )\ /\ 2$.

Given a sequence of integers, find the triangular numbers with those indices.

Task Details

Implement a function called `triangular_numbers`:

Copy

```
def triangular_numbers(nums):
```

- `nums`—`tuple` of `int`s

Return a `tuple` of `int`s.

Restrictions

(See 2a for more restrictions)

For this problem:

- Up to 11 function definition is allowed.
- Recursion is **disallowed**. (The recursion limit has been greatly reduced.)
- Comprehensions are allowed.
- `range` is allowed.
- The source code limit is 500500.

Example Calls

Example 1 Function Call

Copy

```
triangular_numbers((3, 1, 4, 1))
```

Example 1 Return Value

Copy

```
(6, 1, 10, 1)
```

Constraints

- The function `triangular_numbers` will be called at most 1,0001,000 times.
- `nums` will have at most 4040 elements.
- Each element of `nums` has absolute value at most 102010^{20}.

Scoring

- You get 100100 ❤️ points if you solve all test cases.

Report an issue

Clarifications

No clarifications have been made at this time.