[CS 11] Prac 3j – Mag-exercise Tayo Tuwing Umaga

oj.dcs.upd.edu.ph/problem/cs11prac3j

Problem Statement

Today, you have decided that you want to be fit and healthy! So you've started a workout routine—an intense one, where the number of exercises increases every day. Specifically,

- on day 11, you want to perform up to 11 exercise.
- on day 22, you want to perform up to 22 exercises.
- on day 33, you want to perform up to 33 exercises.
- on day 44, you want to perform up to 44 exercises.
- and so on.

You want to perform a sequence of nn exercises, and you want to perform them in that order. Thus, on day 11, you will perform the first exercise, on day 22, you will perform the next two, and so on, until you finish all nn exercises. (On the last day d d, it's okay for there to be less than dd exercises.)

Can you lay out your daily workout routine?

Note that there are 2626 *kinds* of exercises, so we can conveniently represent each kind as a single lowercase letter, and we can represent the sequence of nn exercises as a string.

Task Details

Your task is to implement a function called `fitness_routine`. This function has a single `str` parameter denoting the sequence of exercises.

The function must return a `tuple` of `str`s denoting the exercises for each day in chronological order.

Restrictions

For this problem:

- Recursion is allowed.
- Up to 88 functions are allowed.
- Comprehensions are allowed.
- The `range`, `min`, `max`, and `sum` symbols are allowed.

- The source code limit is 500500.

Example Calls

Example 1 Function Call

Copy

```
fitness_routine('magexercisetayo')
```

Example 1 Return Value

Copy

```
('m', 'ag', 'exe', 'rcis', 'etayo')
```

Example 2 Function Call

Copy

```
fitness_routine('tuwingumaga')
```

Example 2 Return Value

Copy

```
('t', 'uw', 'ing', 'umag', 'a')
```

Constraints

- The function `fitness_routine` will be called at most 200200 times.
- $1 \leq n \leq 60$
- The string consists of lowercase English letters.

Scoring

- You get 100100 ❤️ points if you solve all test cases where:
  - day dd will contain exactly dd exercises.
- You get 5050 ❤️ points if you solve all test cases.

Report an issue

Clarifications

No clarifications have been made at this time.