[CS 11 25.1] HOPE 1 B2 – Matchups

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

Problem Statement

There are $2n$ trainers who want to hold n battles. Each trainer should participate in exactly one battle.

What are all possible ways to pair up the trainers? Two ways are different if a particular trainer fights two different trainers in the two ways.

Task Details

Your task is to implement a function named `matchups`. This function has two parameters: an integer n, and a tuple of $2n$ strings denoting the names of the $2n$ players.

The function must return a `frozenset` of `frozenset`s. Each inner frozenset should contain pairs of strings denoting the two players in a battle. The players should appear in the same order as the appear in the input.

Restrictions

- Your source code must have at most 750 bytes.

Examples

Example 1 Function Call

```
matchups(2, ("Atienza", "Beltran", "Coronel", "Daryll"))
```

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Example 1 Return Value

```
frozenset((
    frozenset((("Atienza", "Beltran"), ("Coronel", "Daryll"))),
    frozenset((("Atienza", "Coronel"), ("Beltran", "Daryll"))),
    frozenset((("Atienza", "Daryll"), ("Beltran", "Coronel"))),
))
```

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Constraints

- The function `matchups` will be called at most 2 times.
- $1 \leq n \leq 7$
- Each trainer's name consists of at most 11 uppercase or lowercase English letters.
- No two trainers have the same name.

Scoring

Note: New tests may be added and all submissions may be rejudged at a later time. (All future tests will satisfy the constraints.)

- You get 25 ❤️ points if you solve all test cases where:
  - $n \leq 2$
- You get 75 🔴 points if you solve all test cases where:
  - $n \leq 5$
- You get 25 🔴 points if you solve all test cases.

Submit solution [CS 11 25.1] HOPE 1

My submissions

Points: 125 (partial)
Time limit: 28.0s
Memory limit: 2G

Problem type

Allowed languages
py3

Clarifications

Report an issue

No clarifications have been made at this time.