[CS 11 25.1] HOPE 1 B1 – Pokédex

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

Problem Statement

In your quest to be the very best (like no one ever was), you decide to train yourself in processing data!

You are given Pokémon data in the form of tuples, with each tuple containing four elements, as follows:

```
(name, region, type1, type2)
```

`name`, `region`, and `type1` are guaranteed to be strings, while `type2` is either a string or the value `None`.

If a Pokémon doesn't have a second type, it will be indicated as `None`.

You are then given a bunch of questions of the form (r, t). For each question, identify the names of all Pokémon that belong to region r **or** have type t.

Task Details

Your task is to implement a function named `process`. This function has two parameters:

- The first parameter is a tuple of tuples, corresponding to the Pokémon data.
- The second parameter is a tuple of pairs, where each pair consists of a string corresponding to a region and a string corresponding to a type.

The function must return a tuple of tuples, where each tuple contains **lowercase** strings corresponding to the names of the Pokémon that are part of the answer to each question. The names should appear in the same order as they appear in the input.

Note that you should treat the data as **case-insensitive**. For example, if a type of `Normal` appears in the data and a type of `normal` appears in a question, these refer to the **same** type.

Restrictions

- Recursion is **disallowed**.
- Your source code must have at most 700 bytes.

Examples

Example 1 Function Call

```
process((
    ('Pikachu', 'Kanto', 'Electric', None),
    ('Dedenne', 'Kalos', 'ELECTRIC', 'Fairy'),
    ('Mimikyu', 'Alola', 'ghost', 'Fairy'),
), (
    ("Kanto", "Electric"),
    ("Kalos", "Ghost"),
))
```

Example 1 Return Value

```
(
    ("pikachu", "dedenne"),
    ("dedenne", "mimikyu"),
)
```

Constraints

- The function `process` will be called at most 200 times.
- There are at most 80 strings of data.
- There are at most 80 questions.
- Each name, region, and type consists of at most 11 uppercase or lowercase English letters.
- No name appears twice in the data.

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:
  - Each name, region, and type only consists of lowercase English letters.
- You get 100 🔴 points if you solve all test cases.

Clarifications

Report an issue

No clarifications have been made at this time.

Submit solution [CS 11 25.1] HOPE 1

My submissions

Points: 125 (partial)
Time limit: 12.0s
Memory limit: 2G

Problem type

Allowed languages
py3