1257. Smallest Common Region

Description

You are given some lists of `regions` where the first region of each list includes all other regions in that list.

Naturally, if a region `x` contains another region `y` then `x` is bigger than `y`. Also, by definition, a region `x` contains itself.

Given two regions: `region1` and `region2`, return *the smallest region that contains both of them*.

If you are given regions `r1`, `r2`, and `r3` such that `r1` includes `r3`, it is guaranteed there is no `r2` such that `r2` includes `r3`.

It is guaranteed the smallest region exists.

Example 1:

```
Input:
regions = [["Earth","North America","South America"],
["North America","United States","Canada"],
["United States","New York","Boston"],
["Canada","Ontario","Quebec"],
["South America","Brazil"]],
region1 = "Quebec",
region2 = "New York"
Output: "North America"
```

Example 2:

```
Input:  regions = [["Earth", "North America", "South America"],["North America", "United States", "Canada"],["United States", "New York", "Boston"],
["Canada", "Ontario", "Quebec"],["South America", "Brazil"]], region1 = "Canada", region2 = "South America"
Output: "Earth"
```

Constraints:

- `2 <= regions.length <= 10`^{4}
- `2 <= regions[i].length <= 20`
- `1 <= regions[i][j].length, region1.length, region2.length <= 20`
- `region1 != region2`
- `regions[i][j]`, `region1`, and `region2` consist of English letters.