

## 1257. Smallest Common Region

Medium 108 14 Add to List Share

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`, `region2`, find out 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's 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"

## Constraints:

- `2 <= regions.length <= 10^4`
- `region1 != region2`
- All strings consist of English letters and spaces with at most 20 letters.

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Seen this question in a real interview before?

Yes

No

```
1 class Solution(object):
2     def findSmallestRegion(self, regions, region1, region2):
3         """
4         :type regions: List[List[str]]
5         :type region1: str
6         :type region2: str
7         :rtype: str
8         """
9
```