1125. Smallest Sufficient Team

Hard   👍22   👎3   ♡Favorite   ⌂Share

In a project, you have a list of required skills `req_skills`, and a list of `people`. The i-th person `people[i]` contains a list of skills that person has.

Consider a *sufficient team*: a set of people such that for every required skill in `req_skills`, there is at least one person in the team who has that skill. We can represent these teams by the index of each person: for example, `team = [0, 1, 3]` represents the people with skills `people[0]`, `people[1]`, and `people[3]`.

Return **any** sufficient team of the smallest possible size, represented by the index of each person.

You may return the answer in any order. It is guaranteed an answer exists.

Example 1:

```
Input: req_skills = ["java","nodejs","reactjs"], people = [["java"],["nodejs"],
["nodejs","reactjs"]]
Output: [0,2]
```

Example 2:

```
Input: req_skills = ["algorithms","math","java","reactjs","csharp","aws"], people =
[["algorithms","math","java"],["algorithms","math","reactjs"],["java","csharp","aws"],
["reactjs","csharp"],["csharp","math"],["aws","java"]]
Output: [1,2]
```

Constraints:

- `1 <= req_skills.length <= 16`
- `1 <= people.length <= 60`
- `1 <= people[i].length, req_skills[i].length, people[i][j].length <= 16`
- Elements of `req_skills` and `people[i]` are (respectively) distinct.
- `req_skills[i][j], people[i][j][k]` are lowercase English letters.
- It is guaranteed a sufficient team exists.

Accepted 525   Submissions 1,710