

Problem 1772: Sort Features by Popularity

Problem Information

Difficulty: Medium

Acceptance Rate: 66.13%

Paid Only: Yes

Tags: Array, Hash Table, String, Sorting

Problem Description

You are given a string array `features` where `features[i]` is a single word that represents the name of a feature of the latest product you are working on. You have made a survey where users have reported which features they like. You are given a string array `responses`, where each `responses[i]` is a string containing space-separated words.

The **popularity** of a feature is the number of `responses[i]` that contain the feature. You want to sort the features in non-increasing order by their popularity. If two features have the same popularity, order them by their original index in `features`. Notice that one response could contain the same feature multiple times; this feature is only counted once in its popularity.

Return the features in sorted order.

Example 1:

Input: `features = ["cooler", "lock", "touch"], responses = ["i like cooler cooler", "lock touch cool", "locker like touch"]` **Output:** `["touch", "cooler", "lock"]` **Explanation:** `appearances("cooler") = 1, appearances("lock") = 1, appearances("touch") = 2`. Since "cooler" and "lock" both had 1 appearance, "cooler" comes first because "cooler" came first in the features array.

Example 2:

Input: `features = ["a", "aa", "b", "c"], responses = ["a", "a aa", "a a a a a", "b a"]` **Output:** `["a", "aa", "b", "c"]`

****Constraints:****

* `1 <= features.length <= 104` * `1 <= features[i].length <= 10` * `features` contains no duplicates. * `features[i]` consists of lowercase letters. * `1 <= responses.length <= 102` * `1 <= responses[i].length <= 103` * `responses[i]` consists of lowercase letters and spaces. * `responses[i]` contains no two consecutive spaces. * `responses[i]` has no leading or trailing spaces.

Code Snippets

C++:

```
class Solution {
public:
    vector<string> sortFeatures(vector<string>& features, vector<string>&
    responses) {

    }

};
```

Java:

```
class Solution {
    public String[] sortFeatures(String[] features, String[] responses) {

    }

}
```

Python3:

```
class Solution:
    def sortFeatures(self, features: List[str], responses: List[str]) ->
    List[str]:
```