2157. Groups of Strings

Description

You are given a **0-indexed** array of strings `words`. Each string consists of **lowercase English letters** only. No letter occurs more than once in any string of `words`.

Two strings `s1` and `s2` are said to be **connected** if the set of letters of `s2` can be obtained from the set of letters of `s1` by any **one** of the following operations:

- Adding exactly one letter to the set of the letters of `s1`.
- Deleting exactly one letter from the set of the letters of `s1`.
- Replacing exactly one letter from the set of the letters of `s1` with any letter, **including** itself.

The array `words` can be divided into one or more non-intersecting **groups**. A string belongs to a group if any **one** of the following is true:

- It is connected to **at least one** other string of the group.
- It is the **only** string present in the group.

Note that the strings in `words` should be grouped in such a manner that a string belonging to a group cannot be connected to a string present in any other group. It can be proved that such an arrangement is always unique.

Return *an array* `ans` *of size* `2` *where:*

- `ans[0]` *is the* ***maximum number*** *of groups* `words` *can be divided into, and*
- `ans[1]` *is the* ***size of the largest*** *group*.

Example 1:

```
Input: words = ["a","b","ab","cde"]
Output: [2,3]
Explanation:
- words[0] can be used to obtain words[1] (by replacing 'a' with 'b'), and words[2] (by adding 'b'). So words[0] is connected to words[1] and words[2].
- words[1] can be used to obtain words[0] (by replacing 'b' with 'a'), and words[2] (by adding 'a'). So words[1] is connected to words[0] and words[2].
- words[2] can be used to obtain words[0] (by deleting 'b'), and words[1] (by deleting 'a'). So words[2] is connected to words[0] and words[1].
- words[3] is not connected to any string in words.
Thus, words can be divided into 2 groups ["a","b","ab"] and ["cde"]. The size of the largest group is 3.
```

Example 2:

```
Input: words = ["a","ab","abc"]
Output: [1,3]
Explanation:
- words[0] is connected to words[1].
- words[1] is connected to words[0] and words[2].
- words[2] is connected to words[1].
Since all strings are connected to each other, they should be grouped together.
Thus, the size of the largest group is 3.
```

Constraints:

- `1 <= words.length <= 2 * 10^4`
- `1 <= words[i].length <= 26`
- `words[i]` consists of lowercase English letters only.
- No letter occurs more than once in `words[i]`.