

2900. Longest Unequal Adjacent Groups Subsequence I

Description

You are given an integer `n`, a **0-indexed** string array `words`, and a **0-indexed** **binary** array `groups`, both arrays having length `n`.

You need to select the **longest subsequence** from an array of indices `[0, 1, ..., n - 1]`, such that for the subsequence denoted as `[i0, i1, ..., ik-1]` having length `k`, `groups[ij] != groups[ij+1]`, for each `j` where `0 < j + 1 < k`.

Return *a string array containing the words corresponding to the indices (in order) in the selected subsequence*. If there are multiple answers, return *any of them*.

A **subsequence** of an array is a new array that is formed from the original array by deleting some (possibly none) of the elements without disturbing the relative positions of the remaining elements.

Note: strings in `words` may be **unequal** in length.

Example 1:

```
Input: n = 3, words = ["e","a","b"], groups = [0,0,1]
Output: ["e","b"]
Explanation: A subsequence that can be selected is [0,2] because groups[0] != groups[2].
So, a valid answer is [words[0],words[2]] = ["e","b"].
Another subsequence that can be selected is [1,2] because groups[1] != groups[2].
This results in [words[1],words[2]] = ["a","b"].
It is also a valid answer.
It can be shown that the length of the longest subsequence of indices that satisfies the condition is 2.
```

Example 2:

```
Input: n = 4, words = ["a","b","c","d"], groups = [1,0,1,1]
Output: ["a","b","c"]
Explanation: A subsequence that can be selected is [0,1,2] because groups[0] != groups[1] and groups[1] != groups[2].
So, a valid answer is [words[0],words[1],words[2]] = ["a","b","c"].
Another subsequence that can be selected is [0,1,3] because groups[0] != groups[1] and groups[1] != groups[3].
This results in [words[0],words[1],words[3]] = ["a","b","d"].
It is also a valid answer.
It can be shown that the length of the longest subsequence of indices that satisfies the condition is 3.
```

Constraints:

- `1 <= n == words.length == groups.length <= 100`
- `1 <= words[i].length <= 10`
- `0 <= groups[i] < 2`
- `words` consists of **distinct** strings.
- `words[i]` consists of lowercase English letters.

