2451. Odd String Difference

Description

You are given an array of equal-length strings `words`. Assume that the length of each string is `n`.

Each string `words[i]` can be converted into a **difference integer array** `difference[i]` of length `n - 1` where `difference[i][j] = words[i][j+1] - words[i][j]` where `0 <= j <= n - 2`. Note that the difference between two letters is the difference between their **positions** in the alphabet i.e. the position of `'a'` is `0`, `'b'` is `1`, and `'z'` is `25`.

- For example, for the string `"acb"`, the difference integer array is `[2 - 0, 1 - 2] = [2, -1]`.

All the strings in words have the same difference integer array, **except one**. You should find that string.

Return *the string in* `words` *that has different* ***difference integer array***.

Example 1:

```
Input: words = ["adc","wzy","abc"]
Output: "abc"
Explanation:
- The difference integer array of "adc" is [3 - 0, 2 - 3] = [3, -1].
- The difference integer array of "wzy" is [25 - 22, 24 - 25]= [3, -1].
- The difference integer array of "abc" is [1 - 0, 2 - 1] = [1, 1].
The odd array out is [1, 1], so we return the corresponding string, "abc".
```

Example 2:

```
Input: words = ["aaa","bob","ccc","ddd"]
Output: "bob"
Explanation: All the integer arrays are [0, 0] except for "bob", which corresponds to [13, -13].
```

Constraints:

- `3 <= words.length <= 100`
- `n == words[i].length`
- `2 <= n <= 20`
- `words[i]` consists of lowercase English letters.