3838. Weighted Word Mapping

Solved ●

Easy   ◔   ♀ Hint

You are given an array of strings `words`, where each string represents a word containing lowercase English letters.

You are also given an integer array `weights` of length 26, where `weights[i]` represents the weight of the ith lowercase English letter.

The **weight** of a word is defined as the **sum** of the weights of its characters.

For each word, take its weight modulo 26 and map the result to a lowercase English letter using reverse alphabetical order (`0 -> 'z'`, `1 -> 'y'`, ..., `25 -> 'a'`).

Return a string formed by concatenating the mapped characters for all words in order.

Example 1:

Input: words = ["abcd","def","xyz"], weights = [5,3,12,14,1,2,3,2,10,6,6,9,7,8,7,10,8,9,6,9,9,8,3,7,7,2]

Output: "rij"

Explanation:

- The weight of `"abcd"` is `5 + 3 + 12 + 14 = 34`. The result modulo 26 is `34 % 26 = 8`, which maps to `'r'`.
- The weight of `"def"` is `14 + 1 + 2 = 17`. The result modulo 26 is `17 % 26 = 17`, which maps to `'i'`.
- The weight of `"xyz"` is `7 + 7 + 2 = 16`. The result modulo 26 is `16 % 26 = 16`, which maps to `'j'`.

Thus, the string formed by concatenating the mapped characters is `"rij"`.

Example 2:

Input: words = ["a","b","c"], weights = [1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1]

Output: "yyy"

Explanation:

Each word has weight 1. The result modulo 26 is `1 % 26 = 1`, which maps to `'y'`.

Thus, the string formed by concatenating the mapped characters is `"yyy"`.

Example 3:

Input: words = ["abcd"], weights = [7,5,3,4,3,5,4,9,4,2,2,7,10,2,5,10,6,1,2,2,4,1,3,4,4,5]

Output: "g"

Explanation:

The weight of `"abcd"` is `7 + 5 + 3 + 4 = 19`. The result modulo 26 is `19 % 26 = 19`, which maps to `'g'`.

Thus, the string formed by concatenating the mapped characters is `"g"`.

Constraints:

- `1 <= words.length <= 100`
- `1 <= words[i].length <= 10`
- `weights.length == 26`
- `1 <= weights[i] <= 100`
- `words[i]` consists of lowercase English letters.

Seen this question in a real interview before?   1/5

Yes   No

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Topics   ⌄

◔   ⌄

Hint 1   ⌄

Hint 2 ⌄

Hint 3 ⌄

Hint 4 ⌄

Discussion (14) ⌄