

3042. Count Prefix and Suffix Pairs I

Description

You are given a **0-indexed** string array `words` .

Let's define a **boolean** function `isPrefixAndSuffix` that takes two strings, `str1` and `str2` :

- `isPrefixAndSuffix(str1, str2)` returns `true` if `str1` is **both** a prefix and a suffix of `str2` , and `false` otherwise.

For example, `isPrefixAndSuffix("aba", "ababa")` is `true` because `"aba"` is a prefix of `"ababa"` and also a suffix, but `isPrefixAndSuffix("abc", "abcd")` is `false` .

Return *an integer denoting the **number of index pairs** `(i, j)` **such that** `i < j` , **and** `isPrefixAndSuffix(words[i], words[j])` **is** `true` .*

Example 1:

Input: words = ["a","aba","ababa","aa"]
Output: 4
Explanation: In this example, the counted index pairs are:
i = 0 and j = 1 because isPrefixAndSuffix("a", "aba") is true.
i = 0 and j = 2 because isPrefixAndSuffix("a", "ababa") is true.
i = 0 and j = 3 because isPrefixAndSuffix("a", "aa") is true.
i = 1 and j = 2 because isPrefixAndSuffix("aba", "ababa") is true.
Therefore, the answer is 4.

Example 2:

Input: words = ["pa","papa","ma","mama"]
Output: 2
Explanation: In this example, the counted index pairs are:
i = 0 and j = 1 because isPrefixAndSuffix("pa", "papa") is true.
i = 2 and j = 3 because isPrefixAndSuffix("ma", "mama") is true.
Therefore, the answer is 2.

Example 3:

Input: words = ["abab","ab"]
Output: 0
Explanation: In this example, the only valid index pair is i = 0 and j = 1, and isPrefixAndSuffix("abab", "ab") is false.
Therefore, the answer is 0.

Constraints:

- `1 <= words.length <= 50`
- `1 <= words[i].length <= 10`
- `words[i]` consists only of lowercase English letters.

