

100208. Count Prefix and Suffix Pairs II

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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`.

User Accepted:	168
User Tried:	1478
Total Accepted:	179
Total Submissions:	2660
Difficulty:	Hard

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:

- $1 \leq words.length \leq 10^5$
- $1 \leq words[i].length \leq 10^5$
- `words[i]` consists only of lowercase English letters.
- The sum of the lengths of all `words[i]` does not exceed $5 * 10^5$.

Java

```
1 class Solution {
2     public long countPrefixSuffixPairs(String[] words) {
3
4     }
5 }
```

☐ Custom Testcase

Use Example Testcases

Run

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