3839. Number of Prefix Connected Groups

Solved

Medium Hint

You are given an array of strings `words` and an integer `k`.

Two words `a` and `b` at **distinct indices** are **prefix-connected** if `a[0..k-1] == b[0..k-1]`.

A **connected group** is a set of words such that each pair of words is prefix-connected.

Return the **number of connected groups** that contain **at least** two words, formed from the given words.

Note:

- Words with length less than `k` cannot join any group and are ignored.
- Duplicate strings are treated as separate words.

Example 1:

> **Input:** words = ["apple","apply","banana","bandit"], k = 2
>
> **Output:** 2
>
> **Explanation:**
>
> Words sharing the same first `k = 2` letters are grouped together:
>
> - `words[0] = "apple"` and `words[1] = "apply"` share prefix `"ap"`.
> - `words[2] = "banana"` and `words[3] = "bandit"` share prefix `"ba"`.
>
> Thus, there are 2 connected groups, each containing at least two words.

Example 2:

> **Input:** words = ["car","cat","cartoon"], k = 3
>
> **Output:** 1
>
> **Explanation:**
>
> Words are evaluated for a prefix of length `k = 3`:
>
> - `words[0] = "car"` and `words[2] = "cartoon"` share prefix `"car"`.
> - `words[1] = "cat"` does not share a 3-length prefix with any other word.
>
> Thus, there is 1 connected group.

Example 3:

> **Input:** words = ["bat","dog","dog","doggy","bat"], k = 3
>
> **Output:** 2
>
> **Explanation:**
>
> Words are evaluated for a prefix of length `k = 3`:
>
> - `words[0] = "bat"` and `words[4] = "bat"` form a group.
> - `words[1] = "dog"`, `words[2] = "dog"` and `words[3] = "doggy"` share prefix `"dog"`.
>
> Thus, there are 2 connected groups, each containing at least two words.

Constraints:

- `1 <= words.length <= 5000`
- `1 <= words[i].length <= 100`
- `1 <= k <= 100`
- All strings in `words` consist of lowercase English letters.

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

Yes No

Accepted 33,451/55.1K | Acceptance Rate 60.7%

Topics

Hint 1

Hint 2

Discussion (24)