

1858. Longest Word With All Prefixes

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Hint

Given an array of strings `words`, find the **longest** string in `words` such that **every prefix** of it is also in `words`.

- For example, let `words = ["a", "app", "ap"]`. The string `"app"` has prefixes `"ap"` and `"a"`, all of which are in `words`.

Return the string described above. If there is more than one string with the same length, return the **lexicographically smallest** one, and if no string exists, return `""`.

Example 1:

Input:

words = ["k","ki","kir","kira", "kiran"]

Output:

"kiran"

Explanation:

"kiran" has prefixes "kira", "kir", "ki", and "k", and all of them appear in words.

Example 2:

Input:

words = ["a", "banana", "app", "appl", "ap", "apply", "apple"]

Output:

"apple"

Explanation:

Both "apple" and "apply" have all their prefixes in words. However, "apple" is lexicographically smaller, so we return that.

Example 3:

Input:

words = ["abc", "bc", "ab", "qwe"]

Output:

""

Constraints:

- $1 \leq \text{words.length} \leq 10^5$
- $1 \leq \text{words}[i].\text{length} \leq 10^5$
- $1 \leq \sum(\text{words}[i].\text{length}) \leq 10^5$

Seen this question in a real interview before? 1/4

Yes No

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