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 <= words.length <= 105
* 1 <= words[i].length <= 105
* 1 <= sum(words[i].length) <= 105