

472. Concatenated Words

**Hard**

3.1K

253



Companies

Given an array of strings `words` (**without duplicates**), return *all the **concatenated words** in the given list of `words`*.

A **concatenated word** is defined as a string that is comprised entirely of at least two shorter words in the given array.

Example 1:

Input: `words =`

`["cat","cats","catsdogcats","dog","dogcatsdog","hippopotamuses","rat","ratcat"]`

Output: `["catsdogcats","dogcatsdog","ratcatdogcat"]`

Explanation: "catsdogcats" can be concatenated by "cats", "dog" and "cats";

"dogcatsdog" can be concatenated by "dog", "cats" and "dog";

"ratcatdogcat" can be concatenated by "rat", "cat", "dog" and "cat".

Example 2:

Input: `words = ["cat","dog","catdog"]`

Output: `["catdog"]`

Constraints:

- $1 \leq \text{words.length} \leq 10^4$
- $1 \leq \text{words}[i].\text{length} \leq 30$
- `words[i]` consists of only lowercase English letters.
- All the strings of `words` are **unique**.
- $1 \leq \text{sum}(\text{words}[i].\text{length}) \leq 10^5$