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1048. Longest String Chain

Medium

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You are given an array of `words` where each word consists of lowercase English letters.

`wordA` is a **predecessor** of `wordB` if and only if we can insert **exactly one** letter anywhere in `wordA` **without changing the order of the other characters** to make it equal to `wordB`.

- For example, "abc" is a **predecessor** of "ababc", while "cba" is not a **predecessor** of "bcad".

A **word chain** is a sequence of words `[word1, word2, ..., wordk]` with `k >= 1`, where `word1` is a **predecessor** of `word2`, `word2` is a **predecessor** of `word3`, and so on. A single word is trivially a **word chain** with `k == 1`.

Return the **length of the longest possible word chain** with words chosen from the given list of `words`.

Example 1:

Input: words = ["a","b","ba","bca","bda","bdca"]

Output: 4

Explanation: One of the longest word chains is ["a","ba","bda","bdca"].

Example 2:

Input: words = ["xbc","pcxbcf","xb","cxbc","pcxbc"]

Output: 5

Explanation: All the words can be put in a word chain ["xb", "xbc", "cxbc", "pcxbc", "pcxbc"].

Example 3:

Input: words = ["abcd","dbqca"]

Output: 1

Explanation: The trivial word chain ["abcd"] is one of the longest word chains. ["abcd","dbqca"] is not a valid word chain because the ordering of the letters is changed.

Constraints:

- 1 <= words.length <= 1000
- 1 <= words[i].length <= 16
- words[i] only consists of lowercase English letters.

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1

class Solution {

2

public int longestStrChain(String[] words) {

3

4

}

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}

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