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단어 리스트에서 words[i] + words[i]가 팰린드롬이 되는 모든 인덱스 조합 (i, j)를 구하라.
Input: words = ["abcd","dcba","lls","s","sssll"]
Output: [[0,1],[1,0],[3,2],[2,4]]
1.브루트포스
class Solution:
  def palindromePairs(self, words: List[str]) -> List[List[int]]:
     def isPalindrome(word):
       return word == word[::-1]
     result = ∏
    for i, word1 in enumerate(words):
       for j, word2 in enumerate(words):
          if i!= j and isPalindrome(word1 + word2):
            result.append((i, j))
     return result
         ▶ 시간 초과
2.Trie 활용
import collections
from typing import List
class TrieNode:
  def init (self):
     self.children = collections.defaultdict(TrieNode)
     self.word id = -1
     self.palindrome_word_ids = []
class Trie:
  def __init__(self):
    self.root = TrieNode()
  @staticmethod
  def is_palindrome(word: str) -> bool:
     return word[::] == word[::-1]
  def insert(self, index, word) -> None:
     node = self.root
     for i, char in enumerate(reversed(word)):
       if self.is_palindrome(word[0:len(word) - i]):
          node.palindrome_word_ids.append(index)
       node = node.children[char]
     node.word_id = index
  def search(self, index, word) -> List[List[int]]:
     result = ∏
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node = self.root
     while word:
       if node.word_id >= 0:
          if self.is_palindrome(word):
            result.append([index, node.word_id])
       if not word[0] in node.children:
          return result
       node = node.children[word[0]]
       word = word[1:]
     if node.word id >= 0 and node.word id != index:
       result.append([index, node.word_id])
     for palindrome_word_id in node.palindrome_word_ids:
       result.append([index, palindrome_word_id])
     return result
class Solution:
  def palindromePairs(self, words: List[str]) -> List[List[int]]:
     trie = Trie()
     for i, word in enumerate(words):
       trie.insert(i, word)
     results = ∏
     for i, word in enumerate(words):
       results.extend(trie.search(i, word))
     return results
```