

140. Word Break II

- Given a string `s` and a dictionary of strings `wordDict`, add spaces in `s` to construct a sentence where each word is a valid dictionary word. Return all such possible sentences in any order.
- Note that the same word in the dictionary may be reused multiple times in the segmentation.

Example 1:

- Input: `s = "catsanddog"`, `wordDict = ["cat","cats","and","sand","dog"]`
- Output: `["cats and dog","cat sand dog"]`

Example 2:

- Input: `s = "pineapplepenapple"`, `wordDict = ["apple","pen","applepen","pine","pineapple"]`
- Output: `["pine apple pen apple","pineapple pen apple","pine applepen apple"]`
- Explanation: Note that you are allowed to reuse a dictionary word.

Example 3:

- Input: `s = "catsanddog"`, `wordDict = ["cats","dog","sand","and","cat"]`
- Output: `[]`

Constraints:

- $1 \leq s.length \leq 20$
- $1 \leq wordDict.length \leq 1000$
- $1 \leq wordDict[i].length \leq 10$
- s and $wordDict[i]$ consist of only lowercase English letters.
- All the strings of $wordDict$ are unique.
- Input is generated in a way that the length of the answer doesn't exceed 10^5 .