140. Word Break II

Description

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 = "catsandog", wordDict = ["cats","dog","sand","and","cat"]
Output: []
```

Constraints:

- `1 <= s.length <= 20`
- `1 <= wordDict.length <= 1000`
- `1 <= wordDict[i].length <= 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.