

68. Text Justification

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Given an array of strings `words` and a width `maxWidth`, format the text such that each line has exactly `maxWidth` characters and is fully (left and right) justified.

You should pack your words in a greedy approach; that is, pack as many words as you can in each line. Pad extra spaces ' ' when necessary so that each line has exactly `maxWidth` characters.

Extra spaces between words should be distributed as evenly as possible. If the number of spaces on a line does not divide evenly between `n` words, the extra spaces occur in the first `n % 3` spaces between words.

For the last line of text, it should be left-justified, and no extra space is inserted between words.

Note:

- A word is defined as a character sequence consisting of non-space characters only.
- Each word's length is guaranteed to be greater than 0 and not exceed `maxWidth`.
- The input array `words` contains at least one word.

Example 1:

```
Input: words = ["This", "is", "an", "example", "of", "text", "justification."], maxWidth = 16
Output:
[
  "This    is    an",
  "example  of text",
  "justification.  "
]
```

Example 2:

```
Input: words = ["What","must","be","acknowledgment","shall","be"], maxWidth = 16
Output:
[
  "What   must   be",
  "acknowledgment ",
  "shall be      "
]
Explanation: Note that the last line is "shall be    " instead of "shall   be", because the last line must be left-justified.
Note that the second line is also left-justified because it contains only one word.
```

Example 3:

```
Input: words = ["Science","is","what","we","understand","well","enough","to","explain","to","a","computer","Art","is","very","beautiful"], maxWidth = 16
Output:
[
  "Science is what we",
  "understand      well",
  "enough to explain to",
  "a computer. Art is",
  "everything else we",
  "do                "
]
```

Constraints:

- 1 <= words.length <= 300
- 1 <= words[i].length <= 20
- words[i] consists of only English letters and symbols.
- 1 <= maxWidth <= 100
- words[i].length <= maxWidth