

2755. Extra Characters in a String

Difficulty : Medium

<https://leetcode.com/problems/extra-characters-in-a-string>

You are given a **0-indexed** string `s` and a dictionary of words `dictionary`. You have to break `s` into one or more **non-overlapping** substrings such that each substring is present in `dictionary`. There may be some **extra characters** in `s` which are not present in any of the substrings.

Return the **minimum** number of extra characters left over if you break up `s` optimally.

Example 1:

Input: `s = "leetscode", dictionary = ["leet","code","leetcode"]`

Output: 1

Explanation: We can break `s` in two substrings: "leet" from index 0 to 3 and "code" from index 5 to 8. There is only 1 unused character (at index 4), so we return 1.

Example 2:

Input: `s = "sayhelloworld", dictionary = ["hello","world"]`

Output: 3

Explanation: We can break `s` in two substrings: "hello" from index 3 to 7 and "world" from index 8 to 12. The characters at indices 0, 1, 2 are not used in any substring and thus are considered as extra characters.

Constraints:

- 1 <= `s.length` <= 50
- 1 <= `dictionary.length` <= 50
- 1 <= `dictionary[i].length` <= 50
- `dictionary[i]` and `s` consists of only lowercase English letters
- `dictionary` contains distinct words