3744. Find Kth Character in Expanded String Premium

Solved

Medium Topics Hint

You are given a string `s` consisting of one or more words separated by single spaces. Each word in `s` consists of lowercase English letters.

We obtain the **expanded** string `t` from `s` as follows:

- For each **word** in `s`, repeat its first character once, then its second character twice, and so on.

For example, if `s = "hello world"`, then `t = "heelllllllooooo woorrrlllldddddd"`.

You are also given an integer `k`, representing a **valid** index of the string `t`.

Return the k^{th} character of the string `t`.

Example 1:

> **Input:** s = "hello world", k = 0
>
> **Output:** "h"
>
> **Explanation:**
>
> t = "heelllllllooooo woorrrlllldddddd". Therefore, the answer is t[0] = "h".

Example 2:

> **Input:** s = "hello world", k = 15
>
> **Output:** " "
>
> **Explanation:**
>
> t = "heelllllllooooo woorrrlllldddddd". Therefore, the answer is t[15] = " ".

Constraints:

- $1 <= s.length <= 10^5$
- `s` contains only lowercase English letters and spaces `' '`.
- `s` **does not contain** any leading or trailing spaces.
- All the words in `s` are separated by a **single space**.
- `0 <= k < t.length`. That is, `k` is a **valid** index of `t`.

Seen this question in a real interview before? 1/5

Yes No

Accepted 225/370 | Acceptance Rate 60.8%

Topics

Hint 1

Hint 2

Hint 3

Discussion (0)