

3119. Maximum Number of Potholes That Can Be Fixed

Premium

- Medium
- Topics
- Companies
- Hint

You are given a string `road`, consisting only of characters `"x"` and `"."`, where each `"x"` denotes a *pothole* and each `"."` denotes a smooth road, and an integer `budget`.

In one repair operation, you can repair `n` **consecutive** potholes for a price of `n + 1`.

Return the **maximum** number of potholes that can be fixed such that the sum of the prices of all of the fixes **doesn't go over** the given budget.

Example 1:

Input: `road = ".."`, `budget = 5`

Output: `0`

Explanation:

There are no potholes to be fixed.

Example 2:

Input: `road = "..xxxxx"`, `budget = 4`

Output: `3`

Explanation:

We fix the first three potholes (they are consecutive). The budget needed for this task is `3 + 1 = 4`.

Example 3:

Input: `road = "x.x.xxx...x"`, `budget = 14`

Output: `6`

Explanation:

We can fix all the potholes. The total cost would be `(1 + 1) + (1 + 1) + (3 + 1) + (1 + 1) = 10` which is within our budget of 14.

Constraints:

- `1 <= road.length <= 105`
- `1 <= budget <= 105 + 1`
- `road` consists only of characters `'.'` and `'x'`.

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

- Yes
- No

Accepted 1.3K | Submissions 2.3K | Acceptance Rate 58.0%

Topics

String

Greedy

Sorting

Companies

0 - 3 months

Geico6

0 - 6 months

Microsoft3

Hint 1

Find all consecutive blocks of `'x'`.

Hint 2

Sort them by their length.

Hint 3

Try to fix the block from the largest one until you have enough budget.

Discussion (2)