3119. Maximum Number of Potholes That Can Be Fixed 🔒

Description

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 <= 10`^{5}
- `1 <= budget <= 10`^{5}` + 1`
- `road` consists only of characters `'.'` and `'x'` .