You are given the customer visit log of a shop represented by a **0-indexed** string customers consisting only of characters 'N' and 'Y':

* if the ith character is 'Y', it means that customers come at the ith hour
* whereas 'N' indicates that no customers come at the ith hour.

If the shop closes at the jth hour (0 <= j <= n), the **penalty** is calculated as follows:

* For every hour when the shop is open and no customers come, the penalty increases by 1.
* For every hour when the shop is closed and customers come, the penalty increases by 1.

Return *the* ***earliest*** *hour at which the shop must be closed to incur a* ***minimum*** *penalty.*

**Note** that if a shop closes at the jth hour, it means the shop is closed at the hour j.

**Example 1:**

Input: customers = "YYNY"  
Output: 2  
Explanation:   
- Closing the shop at the 0th hour incurs in 1+1+0+1 = 3 penalty.  
- Closing the shop at the 1st hour incurs in 0+1+0+1 = 2 penalty.  
- Closing the shop at the 2nd hour incurs in 0+0+0+1 = 1 penalty.  
- Closing the shop at the 3rd hour incurs in 0+0+1+1 = 2 penalty.  
- Closing the shop at the 4th hour incurs in 0+0+1+0 = 1 penalty.  
Closing the shop at 2nd or 4th hour gives a minimum penalty. Since 2 is earlier, the optimal closing time is 2.

**Example 2:**

Input: customers = "NNNNN"  
Output: 0  
Explanation: It is best to close the shop at the 0th hour as no customers arrive.

**Example 3:**

Input: customers = "YYYY"  
Output: 4  
Explanation: It is best to close the shop at the 4th hour as customers arrive at each hour.

**Constraints:**

* 1 <= customers.length <= 105
* customers consists only of characters 'Y' and 'N'.