J – Juliet Unifies Ones

Memory limit: 1024 MB
Time limit: 2 s

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We call a binary string (consisting of ones and zeros) *unified* if all the ones form a contiguous (possibly empty) interval without any zeros in between. Examples of such strings are `0011110`, `1`, and `0000`. However, the binary strings `101` and `00100011` are not unified.

Juliet has a binary string S, and she is willing to remove some characters to make the string unified. When Juliet removes a character, the remaining characters slide to fill the gap.

How many characters must be removed from S to make the remaining characters form a unified binary string?

Input

The input consists of a single line containing the string S ($1 \leq |S| \leq 50$, $S_i =$ `'0'` or $S_i =$ `'1'`).

Output

Output a single integer – the minimum possible number of removed characters.

Example

For the input data:	the correct result is:
`00011011001`	`2`

Explanation of the example:

In the string `00011011001`, Juliet can remove two underlined characters to obtain the unified string `000111100`.