Lightbulbs

Time limit: *1000 ms*
Memory limit: *128 MB*

You are given a row of N lightbulbs, numbered from 1 to N. You know about each lightbulb whether it's turned on or off. You can change the state of lightbulb i if lightbulb $i + 1$ is turned on and lightbulbs $i + 2,\ i + 3, \ldots\ N$ are turned off. This rule doesn't apply to lightbulb N, which can be switched on or off at will.

Compute the minimum number of switches you need to make in order to turn off all the lightbulbs.

Standard input

The input contains a single string of values from the set $\{0,1\}$. N is equal to the length of the string, and each lightbulb is represented by a char. A lightbulb that is switched off is represented by a 0, and one that is switched on by a 1.

Standard output

The output should contain a single number representing the minimum number of switches needed.

Constraints and notes

- $1 \leq N \leq 50$

Input	Output
`1101`	`9`
`1011`	`13`
`1001101011`	`946`