CODECON

Bit Flip (100 points)

Introduction

Your friend Inquisitive Ingrid comes up to you with a string composed of 1s and 0s and asks you the following question:

What is the longest sequence of 1s in this number if you can flip any bit you want from 0 to 1?

Input Specifications

Your input will be a a single line of exactly 32 characters, each character either 0 or 1.

Output Specifications

Output is a single integer: the length of the longest contiguous sequence of 1s that can exist when a single 0 is flipped to 1.

(Remember, you don't need to figure out *which* bits form the longest sequence; You only need to find the *length* of the longest sequence given only a single flip.)

Sample Input/Output

Input

00000000000000000000000000011110

Output

5

Explanation

A single bit can be flipped on either end of the sole sequence of ones to make a sequence of length 5.

Input

11110111001101010000000110100100

Output

8

Explanation

Flipping the 5th bit creates a sequence of 8.

Input

00100001000000000000000100000001

Output

2

Explanation

All the 1s are isolated, so the best sequence we can create is 2.

Input

00000000000000000000000000000000

Output

1

Explanation

All bits are 0, so the longest sequence we can create is 1.

Input

11111111111111111111111111111111

Output

32

Explanation

No bits can be flipped, since they're all 1; the longest sequence is 32.