Collecting Diamonds

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

Our best explorer, Vingying, finds a deep cave that is full of diamonds! Well, he is a very careful man, so he decides to do some research before collecting them.

The diamonds can be divided into three kinds, noted as A,B,C for convenience. There are a total of n diamonds in a row, which can be regarded as a sequence $s_1, s_2, \ldots, s_n$ from left to right. Vingying will perform the operation several times, which consists of the following three steps in order.

1. Choose an index i ($1 \leq i \leq n-2$) satisfying $s_i = \text{A}$, $s_{i+1} = \text{B}$, $s_{i+2} = \text{C}$.
2. If the index is odd, then collect s_i and s_{i+2}; otherwise, collect s_{i+1}.
3. Update n to the number of diamonds left and reindex the diamonds.

For example, s = ABCABC. We can choose index 1 and collect $1, 3$, then s becomes BABC indexed $1, 2, 3, 4$. But if we choose index 4 and collect 5, then s becomes ABCAC indexed $1, 2, 3, 4, 5$.

Vingying wants to know the maximum number of **operations** (not the diamonds) he can do.

Input

The input contains a string consisting of only A,B,C representing the sequence of the diamonds. The length of the string won't exceed 2×10^5.

Output

Output a single integer representing the maximum number of **operations**.

Examples

standard input	standard output
ABCAAABCCC	2
AABCAAABCCC	4