

# Minimum Characters For Palindrome

## Problem Description

Given a string **A**. The only operation allowed is to insert characters at the beginning of the string. Find how many minimum characters are needed to be inserted to make the string a palindrome string.

## Problem Constraints

$1 \leq |A| \leq 10^6$

## Input Format

The only argument given is string A.

## Output Format

Return the minimum characters that are needed to be inserted to make the string a palindrome string.

## Example Input

Input 1:

A = "ABC"

Input 2:

A = "ACECAAAA"

## Example Output

Output 1:

2

Output 2:

2

## Example Explanation

Explanation 1:

Insert 'B' at beginning, string becomes: "BABC".

Insert 'C' at beginning, string becomes: "CBABC".

Explanation 2:

Insert 'A' at beginning, string becomes: "AAACECAAAA".

Insert 'A' at beginning, string becomes: "AAAACECAAAA".