Alternating Characters ☆

Problem Submissions Leaderboard Editorial Topics

You are given a string containing characters A and B only. Your task is to change it into a string such that there are no matching adjacent characters. To do this, you are allowed to delete zero or more characters in the string.

Your task is to find the minimum number of required deletions.

For example, given the string $s = AABAAB$, remove an A at positions 0 and 3 to make $s = ABAB$ in 2 deletions.

Function Description

Complete the alternatingCharacters function in the editor below. It must return an integer representing the minimum number of deletions to make the alternating string.

alternatingCharacters has the following parameter(s):

- s: a string

Input Format

The first line contains an integer q, the number of queries.
The next q lines each contain a string s.

Constraints

- $1 \leq q \leq 10$
- $1 \leq |s| \leq 10^5$
- Each string s will consist only of characters A and B

Output Format

For each query, print the minimum number of deletions required on a new line.

Sample Input

```
5
AAAA
BBBBB
ABABABAB
BABABA
AAABBB
```

Sample Output

```
3
4
0
0
4
```

Explanation

The characters marked red are the ones that can be deleted so that the string doesn't have matching consecutive characters.

AAAA -> A (3 deletions)

BBBBB -> B (4 deletions)

ABABABAB -> ABABABAB (0 deletions)

BABABA -> BABABA (0 deletions)

AAABBB -> AB (4 deletions)

C#

```
using System.Collections.Generic;
using System.Collections;
using System.ComponentModel;
using System.Diagnostics.CodeAnalysis;
using System.Globalization;
using System.IO;
using System.Linq;
using System.Reflection;
using System.Runtime.Serialization;
using System.Text.RegularExpressions;
using System.Text;
using System;

class Solution {

    // Complete the alternatingCharacters function below.
    static int alternatingCharacters(string s) {
        var count = 0;

            for(int i = 0; i < s.Length-1; i++ )
            {
                count +=  s[i] == s[i+1] ? 1 : 0;
            }
        return count;
    }

    static void Main(string[] args) {
        TextWriter textWriter = new StreamWriter(@System.Environment.GetEnvironmentVariable("OUTPUT_PATH"), true);

```

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