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Beautiful Binary String



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Problem

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Alice has a **binary string**, B , of length n . She thinks a binary string is beautiful if and only if it doesn't contain the **substring** "010".

In one step, Alice can change a **0** to a **1** (or vice-versa). Count and print the minimum number of steps needed to make Alice see the string as beautiful.

Input Format

The first line contains an integer, n (the length of binary string B).

The second line contains a single binary string, B , of length n .

Constraints

- $1 \leq n \leq 100$
- Each character in $B \in \{0, 1\}$.

Output Format

Print the minimum number of steps needed to make the string beautiful.

Sample Input 0

```
7
0101010
```

Sample Output 0

```
2
```

Sample Input 1

```
5
01100
```

Sample Output 1

```
0
```

Sample Input 2

```
10
0100101010
```

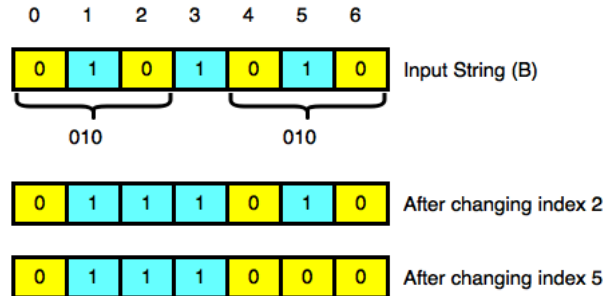
Sample Output 2

3

Explanation**Sample Case 0:**

In this sample, $B = "0101010"$

The figure below shows a way to get rid of each instance of "010":



Because we were able to make the string beautiful by changing **2** characters (B_2 and B_5), we print **2**.

Sample Case 1:

In this sample $B = "01100"$

The substring "010" does not occur in B , so the string is already beautiful and we print **0**.

f t in

Submissions: 17784

Max Score: 20

Difficulty: Easy

Rate This Challenge:

★★★★★ Thanks!

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Current Buffer (saved locally, editable) ↗ ↻

C#

```

1 using System;
2 using System.Collections.Generic;
3 using System.IO;
4 using System.Linq;
5 class Solution {
6
7     static void Main(String[] args) {
8         int n = int.Parse(Console.ReadLine());
9         string b = Console.ReadLine(); //"0100101010";
10
11         // string b = "0101010";
12         // string b = "00000000000000000000000000000000";
13         //string b = "01100";
14         //string b = "0100101010";
15         char[] bc = b.ToCharArray();
16         int indiceAnt =0;
17         int indicePost=0;
18         int cont = 0;
19         while ( indiceAnt >-1 && indicePost !=-1 )
20         {
21             indiceAnt = new string(bc).IndexOf( "010", indiceAnt);
22             if (indiceAnt > -1)
23             {
24                 indicePost = new string(bc).IndexOf("010", indiceAnt+2);
25             }
26             if (indiceAnt + 2 == indicePost)

```

```
27 {  
28     bc[indiceAnt + 2] = '1';  
29     cont++;  
30 }  
31 else if(indiceAnt > -1)  
32 {  
33     bc[indiceAnt + 2] = '1';  
34     cont++;  
35 }  
36  
37 }  
38 //Console.WriteLine(new string(bc));  
39 Console.WriteLine(cont);  
40 }  
41 }  
42 }
```

Line: 23 Col: 19

 [Upload Code as File](#)☐ Test against custom input[Run Code](#)[Submit Code](#)

Congrats, you solved this challenge!

 Test Case #0 Test Case #3 Test Case #6 Test Case #9 Test Case #1 Test Case #4 Test Case #7 Test Case #10 Test Case #2 Test Case #5 Test Case #8 Test Case #11[Next Challenge](#)

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