

# Minimum Flips to Make the Binary String Alternate

Try to solve the Minimum Flips to Make the Binary String Alternate problem.



#### **Statement**

Given a binary string s, the following two operations can be performed in any sequence:

- Remove the character at the start of the string s and append it to the end of the string.
- Pick any character from the string and flip its value. in other words, if its value is 0, it becomes 1 and vice versa.

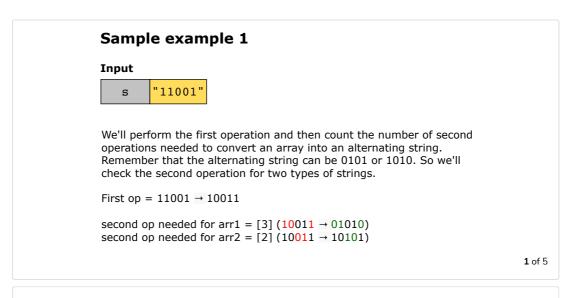
Your task is to return the minimum number of type-2 operations that you need to perform before  $\frac{1}{5}$  becomes alternating.

**Note:** The string is called alternating if no two adjacent characters are equal.

#### **Constraints:**

- $1 \leq \text{s.length} \leq 10^5$
- s[i] is either 0 or 1.

### **Examples**



Sample example 1

Input

c "11001"

?

"

6

2 11001

```
First op = 10011 \rightarrow 00111
```

```
second op needed for arr1 = [3, 3] (00111 \rightarrow 01010) second op needed for arr2 = [2, 2] (00111 \rightarrow 10101)
```

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## Sample example 1

#### Input

```
s "11001"
```

First op = 
$$00111 \rightarrow 01110$$

```
second op needed for arr1 = [2, 2, 1] (01110 \rightarrow 01010) second op needed for arr2 = [2, 2, 4] (01110 \rightarrow 10101)
```

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## Sample example 1

#### Input

```
First op = 01110 \rightarrow 11100
```

```
second op needed for arr1 = [2, 2, 1, 3] (\frac{11100}{0.0000} \rightarrow 0.000) second op needed for arr2 = [2, 2, 4, 2] (\frac{11100}{0.0000} \rightarrow 1.000)
```

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## Sample example 1

#### Input

```
s "11001"
```

Result = min([2, 2, 1, 3], [2, 2, 4, 2]) = 1

#### **Output**

1

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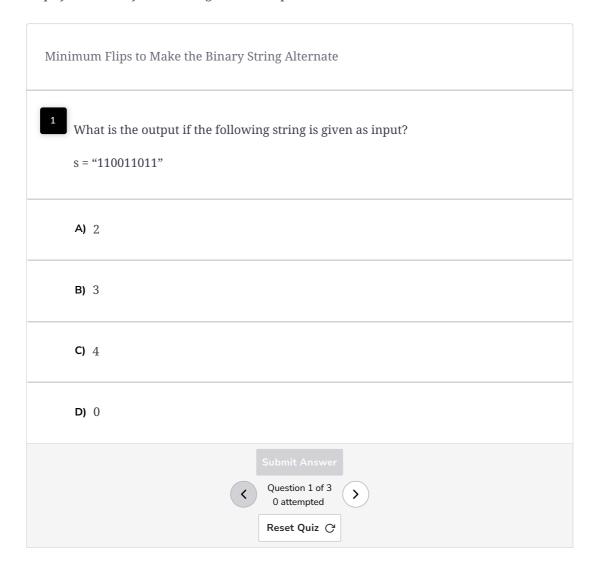
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[]

# Understand the problem

Let's take a moment to make sure you've correctly understood the problem. The quiz below helps you check if you're solving the correct problem:



## Try it yourself

Implement your solution in the following coding playground:

```
👙 Java
                                                                                                             ■ C
               usercode > main.java
                  1 import java.util.*;
                     public class Main{
                  3
                          public static int minFlips(String s) {
       >_
\equiv
                              return 0;
                  8
                          }
                  9 }
                                                                                    Powered by Al
                                                                                                      \triangleright
                                                                                                            Submit
                Test Cases
                                                                                                                                  6
                             Results
```

