

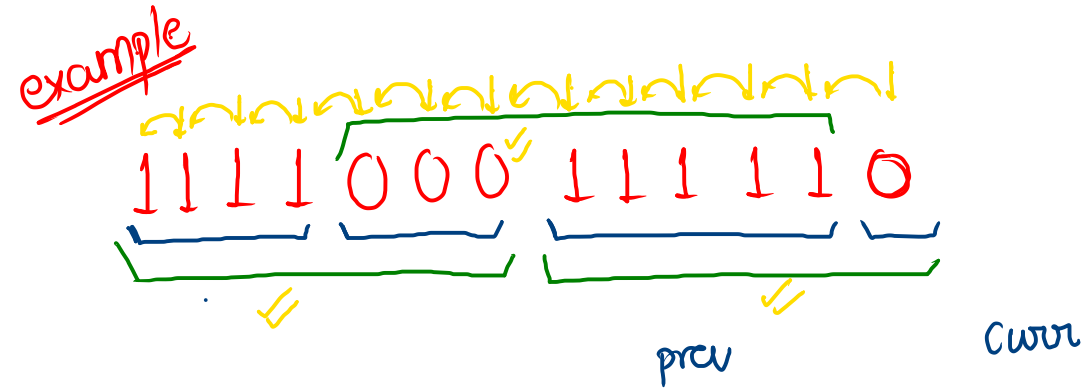
```

public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    String str = scn.nextLine();

    System.out.println(count01(str));
}

public static int count01(String str) {
    int curr = 1; ✓
    int prev = 0;
    int ans = 0;
    for (int i = 1; i < str.length(); i++) {
        if ( str.charAt(i) == str.charAt(i - 1) ) {
            curr++;
        } else {
            ans += Math.min( curr, prev );
            prev = curr;
            curr = 1;
        }
    }
    ans += Math.min( curr, prev );
    return ans;
}

```



$prev = 0 \ 1 \ 2 \ 3 \ 4 \ 5$
 $curr = 1 \ 2 \ 3 \ 4 \ 1 \ 2 \ 3 \ 4 \ 5 \ 1$

$$\begin{aligned}
 ans &= 0 + 3 + 3 + 1 \\
 &= 7
 \end{aligned}$$

Long Pressed Name

Examples

1) str = "alex"
target = "aaleex" True

2) str = "alex"
target = "aalex" False

3) str = "Dhiraj"
target = "DDiirajj" False

✓ a) Array as HM
b) 2 pointers

str = "alex"
 0 1 2 3
 i ↓

if i char & j char
are same :-
i++, j++
else
j++

tar = "aalexxxx"
 0 1 2 3 4 5 6 7
 j ↑

- 1) when char are equal
- 2) " " " unequal
- 3) when to stop

str

a l e x a b c

if i char & j char
are same :-
i++, j++

two →

a a l l e x x

else
j++

False

```

public static boolean longPressed(String str, String tar) {
    int i = 0;
    int j = 0;
    while (j < tar.length()) {
        if ( i < str.length() && str.charAt(i) == tar.charAt(j) ) {
            ✓i++;
        } else if ( j == 0 || tar.charAt(j) != tar.charAt(j - 1) ) {
            return false;
        }
        j++;
    }
    return i == str.length();
}


```




 str = alex ;



 tar = aaleexa ;



 str = " " ;



 tar = "aax" ;

Merge Strings Alternatively

str1 = "Mohmad"
0 1 2 3 4 5
str2 = "Ismail"
0 1 2 3 4 5

ans = "MIoshmmaidl"

```
public static void main(String[] args) {  
    Scanner scn = new Scanner(System.in);  
    String str1 = scn.nextLine();  
    String str2 = scn.nextLine();  
    System.out.println(mergeString(str1, str2));  
}
```

```
public static String mergeString(String str1, String str2) {  
    String ans = "";  
    for (int i = 0; i < str1.length(); i++) {  
        ans += str1.charAt(i);  
        ans += str2.charAt(i);  
    }  
    return ans;  
}
```

⇒ String in Java is Immutable

(1000) ans = "" ;

(1002) ans = "a" ;

(1004) ans = "ax" ;

(1006) ans = "axb" ;

(1008) ans = "axby" ;

⋮
⋮
⋮

str1 = "abc" ;
 ↓ ↓

str2 = "xyz" ;
 ↑

String is immutable

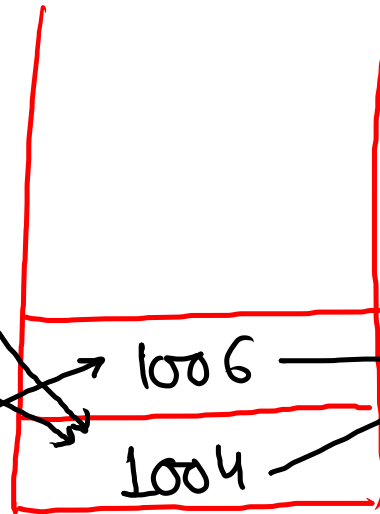
(1004)
str1 = "abc"

(1004)
str = "abc"

①

(1006)

str3 = "xyz"



stack

heap

"abc"

②

"xyz"

2 level architecture

StringBuilder

StringBuffer