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Mars Exploration

by Shafaet

Problem	Submissions	Leaderboard	Discussions	Editorial
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Sami's spaceship crashed on Mars! She sends n sequential SOS messages to Earth for help.



Letters in some of the SOS messages are altered by cosmic radiation during transmission. Given the signal received by Earth as a string, S , determine how many letters of Sami's SOS have been changed by radiation.

Input Format

There is one line of input: a single string, S .

Note: As the original message is just SOS repeated n times, S 's length will be a multiple of 3.

Constraints

- $1 \leq |S| \leq 99$
- $|S| \% 3 = 0$
- S will contain only uppercase English letters.

Output Format

Print the number of letters in Sami's message that were altered by cosmic radiation.

Sample Input 0

```
SOSPSSQSSOR
```

Sample Output 0

```
3
```

Sample Input 1

```
SOSSOT
```

Sample Output 1

```
1
```

Explanation

Sample 0

$S = \text{SOSPSSQSSOR}$, and signal length $|S| = 12$. Sami sent 4 SOS messages (i.e.: $12/3 = 4$).

Expected signal: **SOSSOSSOSSOS**

Recieved signal: **SOSSPSSQSSOR**

We print the number of changed letters, which is 3.

Sample 1

$S = \text{SOSSOT}$, and signal length $|S| = 6$. Sami sent 2 SOS messages (i.e.: $6/3 = 2$).

Expected Signal: **SOSSOS**

Received Signal: **SOSSO T**

We print the number of changed letters, which is **1**.

[f](#) [t](#) [in](#)

Submissions: 26406



Max Score: 15



Difficulty: Easy

Rate This Challenge:

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Current Buffer (saved locally, editable)  

C++  

```
1 #include <map>
2 #include <set>
3 #include <list>
4 #include <cmath>
5 #include <ctime>
6 #include <deque>
7 #include <queue>
8 #include <stack>
9 #include <string>
10 #include <bitset>
11 #include <cstdio>
12 #include <limits>
13 #include <vector>
14 #include <climits>
15 #include <cstring>
16 #include <cstdlib>
17 #include <fstream>
18 #include <numeric>
19 #include <sstream>
20 #include <iostream>
21 #include <algorithm>
22 #include <unordered_map>
23
24 using namespace std;
25
26
27 int main(){
28     string S;
29     string check = "SOS";
30     cin >> S;
31     int errors = 0;
32     for (int i = 0; i < S.size(); i++) {
33         if (S[i] != check[i % 3]) {
34             errors++;
35         }
36     }
37     cout << errors << "\n";
38     return 0;
39 }
40
```

Line: 1 Col: 1

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