



Dashboard > Algorithms > Strings > Mars Exploration

Badge Progress [\(Details\)](#)

Points: 324.57 Rank: 131602

Mars Exploration

by Shafaet

Problem

Submissions

Leaderboard

Discussions

Editorial

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

```
SOSSPSSQSSOR
```

Sample Output 0

```
3
```

Sample Input 1

```
SOSSOT
```

Sample Output 1

1

Explanation**Sample 0**

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

Expected signal: **SOSSOSSOSSOS**

Received signal: **SOSS P SS Q SSO R**

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:**46946**Max Score:**15**Difficulty:** Easy**Rate This Challenge:**

☆☆☆☆☆

[More](#)

Current Buffer (saved locally, editable)  

C++14  

```
1 #include <cmath>
2 #include <cstdio>
3 #include <vector>
4 #include <iostream>
5 #include <algorithm>
6 using namespace std;
7
8
9 int main() {
10     /* Enter your code here. Read input from STDIN. Print output to STDOUT */
11     return 0;
12 }
13
```

Line: 1 Col: 1

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