Problem: Mars Exploration

Sami's spaceship crashed on Mars! She sends  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, , determine how many letters of Sami's SOS have been changed by radiation.

**Input Format**

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

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

**Constraints**

* 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**

 = **SOSSPSSQSSOR**, and signal length . Sami sent  SOS messages (i.e.: ).

Expected signal: **SOSSOSSOSSOS**  
Recieved signal: **SOSSPSSQSSOR**

We print the number of changed letters, which is .

**Sample 1**

 = **SOSSOT**, and signal length . Sami sent  SOS messages (i.e.: ).

Expected Signal: **SOSSOS**   
Received Signal: **SOSSOT**

We print the number of changed letters, which is .

Solution

static int marsExploration(String s)

{

int length = s.length();

int counter=0;

for(int i=0; i<length; i++)

{

if( (i+1)%3==0 ) { if( s.charAt(i)!='S' ) { counter++; } }

else if( (i+1)%3==1 ) { if( s.charAt(i)!='S' ) { counter++; } }

else if( (i+1)%3==2 ) { if( s.charAt(i)!='O') { counter++; } }

}

return counter;

}

Elegant Solution

public static int countChanges(String message) {

String sos = "SOS";

int count = 0;

for (int i = 0; i < message.length(); i++) {

if (message.charAt(i) != sos.charAt(i % 3)) count++;

}

return count;

}

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