## **Problem D: Mysterious Necklaces**

#### Description

Mpendasifa discovered a mysterious treasure buried in a banana plantation in Sumbawanga.



The treasure contained broken necklaces with beads made of silver or gold. Mpendasifa inspected the necklaces for a few days and discovered something unbelievable. When he tapped any two beads in any necklace, the two beads and all other between the two beads change from gold to silver or silver to gold (depending on what they were at the beginning). This transformation happens when he taps for the first time only (i.e. tapping a second time will have no effect). Mpendasifa knows that he can get rich if he can just figure out the best two beads to tap for each necklace. Help him to become the next billionaire in Tanzania.

#### Input

The only line of the input contains a series of G's and S's symbolizing the golden and silver beads contained in a necklace.

#### Output

Display the maximum number of golden beads that Mpendasifa can get from a necklace by tapping two beads in the necklace. Obviously some necklaces should not be tapped (like when they contain only golden beads). For instance, in Figure 1 below, tapping the second and sixth beads will transform the necklace to the necklace in Figure 2.







Figure 2

**NB**: Kindly note that your solution will be run at least five times. Each time, it will be tested against a different set of input. The first few test cases are given below to help you check your solution. The remaining tests can be seen from the contest page for this problem or the results page after you submit your solution.

# Test 1

Input	Output
GSSGSS	5

Tap the 2<sup>nd</sup> and 6<sup>th</sup>

### Test 2

Input	Output
GSSSSSSSG	10

Tap the 2<sup>nd</sup> and 9<sup>th</sup>

# Test 3

Input	Output
SGGGGGGGS	8

Do not tap any