

There are N balls positioned in a row. Each of them is either red or white. In one move we can swap two adjacent balls. We want to arrange all the red balls into a consistent segment. What is the minimum number of swaps needed?

Write a function:

```
int solution(string &S);
```



that, given string S of length N built from characters "R" and "W", representing red and white balls respectively, returns the minimum number of swaps needed to arrange all the red balls into a consistent segment. If the result exceeds 10^9 , return -1.

Examples:

1. Given $S = \text{"WRRWWR"}$, your function should return 2. We can move the last ball two positions to the left:

- "WRRWRW"