**Broken Bonds**

Samantha works at a company that monitors CO2 emissions from local power plants. Currently they are researching for new emissions that aren’t being picked up by the sensors. More specifically, she is looking for “broken bonds”, bonds of chemicals in which there is exactly one Carbon atom or exactly one Oxygen atom. *She selects at least a sequence of three or more atoms to determine if they’re broken bonds.*

Given the lineup of the atoms, can you help Samantha determine how many broken bonds there are? *Broken bonds are different if they start or end at different atoms in the lineup.*

**Input:** There are two lines of input. The first line contains **N**, the number of atoms. The second line contains **N** atoms. It consists of either C for Carbon, or O for Oxygen.

**Output:** The amount of broken bonds.

**Example Input:**

5

COCOC

**Example Output:**

3

**Explanation:** Every substring of length three in this example contains exactly one Carbon atom or exactly one Oxygen atom, so these substrings are determined to be broken bonds. All long substrings (COCO, OCOC, COCOC) are not broken bonds.