## Problem 2: Southern Cross

As the result of a long-ago (and most unfortunate) argument with a Gypsy fortuneteller, when traveling to conferences, Jane always has to book her hotel so that her hotel and the conference venue are on the same street, her hotel is on the south side of that street, the conference venue is on the north side of that street, and she can walk from the hotel to the conference venue by walking east from her hotel. She wants to complete this walk as fast as she can. As the most time-consuming part of her walk is crossing side roads that intersect with the hotel-conference street, she wants to minimize the number of times she needs to cross any such roads. Since there can occasionally be many side roads, it is sometimes more convenient for her to cross the street a few times to avoid crossing multiple side roads.

The intersections on a hotel-conference street encountered in walking from the hotel to the conference-venue are encoded as follows: let N and S denote side roads entering from the north and south, respectively, and C denote a side road crossing both sides of the street. Given this, the street from the hotel to the conference venue is encoded as a sequence made up of the letters N, S and C. For example, given the street description NSNNCSSSSNSC, the minimum-crossing route from the hotel to the conference venue involves: a total of 5 road-crossings:



Write a program which, given a description of a hotel-conference street, computes and outputs the smallest number of road-crossings required to walk that street from the hotel to the conference. Your input will be a textfile in which the only line gives the description of the street. You may assume that all input files are formatted correctly.

**Sample input #1** (available as file "test2a.dat"):

NSNNCSSSSNSC

Sample output #1:

Minimum number of crossings is 5

**Sample input #2** (available as file "test2b.dat"):

CCCSSSSSSSSSS

Sample output #2:

Minimum number of crossings is 4

**Sample input #3** (available as file "test2c.dat"):

NSCNSCNSCNSCNSC

Sample output #3:

Minimum number of crossings is 10