

Magnus lost a game of chess to Kile so he found comfort in competitive programming. Very soon, he heard of the iconic COCI competition and decided to try his luck there.

He wrote a mail to Kile: *“Dear Kile, please, prepare me for COCI. Magnus”*.

Kile replied: *“You want to participate in COCI? All right, here's your warm-up task. A series of four consecutive letters of some word that make up the subword “HONI” (Croatian acronym for COCI) is called the HONI-block. I will send you the word of length N and you will throw out as many letters as you want (it might be none as well) so that in the end there are as many HONI-blocks as possible in the word. Kile”*.

Magnus was very worried and asked you, COCI competitive scene, for help. Help him determine the maximum number of HONI-blocks he can get in the final word.

INPUT

The first line contains a word of length N ($1 \leq N \leq 100\,000$), consisting of uppercase letters of the English alphabet.

OUTPUT

In the first and only line print out the required number of HONI-blocks.

SAMPLE TESTS

input

MAGNUS

output

0

input

HHHHOOOONNNNIIII

output

1

input

PROHODNIHODNIK

output

2

Explanation of the second sample test:

By throwing out three letters ‘H’, ‘O’, ‘N’ or ‘I’ Magnus can get the word “HONI”, which contains one HONI-block.