

## B. Strings of Power

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

Volodya likes listening to heavy metal and (occasionally) reading. No wonder Volodya is especially interested in texts concerning his favourite music style.

Volodya calls a string powerful if it starts with "heavy" and ends with "metal". Finding all powerful substrings (by substring Volodya means a subsequence of consecutive characters in a string) in a given text makes our hero especially joyful. Recently he felt an enormous fit of energy while reading a certain text. So Volodya decided to count all powerful substrings in this text and brag about it all day long. Help him in this difficult task. Two substrings are considered different if they appear at the different positions in the text.

For simplicity, let us assume that Volodya's text can be represented as a single string.

### Input

Input contains a single non-empty string consisting of the lowercase Latin alphabet letters. Length of this string will not be greater than  $10^6$  characters.

### Output

Print exactly one number — the number of powerful substrings of the given string.

Please, do not use the %lld specifier to read or write 64-bit integers in C++. It is preferred to use the cin, cout streams or the %I64d specifier.

### Examples

<b>input</b>
heavymetalisheavymetal
<b>output</b>
3
<b>input</b>
heavymetalismetal
<b>output</b>
2
<b>input</b>
trueheavymetalissotruewellitisalsoheavythatyoucanalmostfeeltheweightofmetalonyou
<b>output</b>
3

### Note

In the first sample the string "heavymetalisheavymetal" contains powerful substring "heavymetal" twice, also the whole string "heavymetalisheavymetal" is certainly powerful.

In the second sample the string "heavymetalismetal" contains two powerful substrings: "heavymetal" and "heavymetalismetal".

### → Attention

Package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then value 800 ms will be displayed and used to determine the verdict.

### Codeforces Round #188 (Div. 2)

Finished

### → Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

### → Problem tags

implementation strings two pointers  
No tag edit access

### → Contest materials

- Announcement