UCF "Practice" Local Contest — August 19-23, 2024

Parity of Strings

filename: parity
Difficulty Level: Easy
Time Limit: 5 seconds

The historical battle between *numbers* and *strings* has taken a new twist: *numbers* are bragging on their categorization of being "even" or "odd" and *strings* lacking such feature. But don't count *strings* out yet!

A string is considered "even" if *every* letter in the string appears an even number of times; the string is "odd" if *every* letter in the string appears an odd number of times.

The Problem:

Given a string, determine whether the string is even, odd, or neither.

The Input:

The input consists of a single line, starting in column 1, not exceeding column 70, and containing only the lowercase letters (at least one letter).

The Output:

The output consists of a single integer: print 0 (zero) if the string is even, 1 (one) if the string is odd, or 2 if the string is not even and is not odd (i.e., it is neither).

Sample Input Sample Output

| coachessoaehwwwwww | 0 |
|--------------------|---|
| coachesarefun | 2 |
| coachesc | 1 |