

## Problem A

### Numbers

Input File: standard input  
Output File: standard output  
Time Limit: 0.3 seconds (C/C++)  
Memory Limit: 256 megabytes

A palindrome is an integer which reads the same backward as forward. For example, numbers 142241 and 102201 are palindromes, but 1023401 and 10510 — no. You want to represent a number  $n$  as the sum of two palindromes. Find the number of ways to do it.

#### Input

There is only one line containing the integer  $n$  ( $1 \leq n \leq 10^{18}$ ).

#### Output

Output one number — the number of ways to represent the number  $n$  as the sum of two palindromes.

Sample input	Sample output
156	4
9524	4
42657	6
5735832847451	28

#### Note

In the first test, the following pairs of numbers are suitable: (5, 151), (55, 101), (101, 55), (151, 5).

In the second test, the following pairs of numbers are suitable: (515, 9009), (636, 8888), (8888, 636), (9009, 515).

In the third test, the following pairs of numbers are suitable: (33, 42624), (333, 42324), (4884, 37773), (37773, 4884), (42324, 333), (42624, 33).