

Foydalanuvchi Ma'lumotlari

Problem H. How Many Representations?

Input file: `standard input`
Output file: `standard output`
Time limit: 2 seconds
Memory limit: 1024 megabytes

In the monetary system of Byteland, the denominations of all coins are elements of the sequence C_i , defined as follows: $C_1 = 1$, $C_2 = 2$, $C_i = C_{i-1} + C_{i-2}$ for all $i > 2$. Coins with the same denominations are considered identical, while coins with different denominations are considered distinct.

You need to find the number of ways to pay the sum of N using **distinct** coins. Two ways are considered different if a coin is present in one partition and absent in the other.

Input

The input contains a single integer N ($1 \leq N \leq 10^{18}$) - the amount of money to be paid.

Output

Output a single integer — the answer to the problem.

Examples

standard input	standard output
21	4
116	8

Note

For the first example ($N = 21$), possible exchanges: 21, 13+8, 13+5+3, 13+5+2+1.

Asosiy Ma'lumotlar

Field	Details
Ism Familya	ulugbek abdulazizov
Telefon raqam	123
Tug'ilgan yil	2003
Yo'nalish	Kompyuter mutaxassisi
Hudud	Farg'ona
Millat	O'zbek
Ma'lumot	Oliy Bakalavr
Oilaviy holat	Turmush qurgan

Ish Tajribasi

Field	Details
Ish tajribasi	yo'q
Oylik maosh	yoq'

Muddat	yo;q
Sudlanganmi	Sudlangan

Ko'nikmalar va Dasturlar

Field	Details
Haydovchilik guvohnomasi	B, C ■
Shaxsiy avtomobil	Bor
Word dasturi bilish darajasi	100 %
Excel dasturi bilish darajasi	100 %
Boshqa dasturlar bilish darajasi	Yo'q