



STUDENT REPORT

DETAILS

Name

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EXPERIMENT

Title

SOLVE THE EQUATION

Description

Given an integer N, your task is to find and return the number of sets of 3 positive integers a, b and c. that satisfy the following equation:

$$a^2+b^2+c^2+ab+bc+ca = N$$

Note: a, b and c are positive integers, and their values can be the same.

Input Specification:

input1: An integer value N

Output Specification:

Return an integer value, representing the number of sets of three positive integers that satisfy the equation given above.

Sample Input:

6

Sample Output:

1

Explanation:

The only pair (a,b,c) possible is (1,1,1)

Source Code:

```
n=int(input())
cnt=0

for a in range(1,int(n**0.5)+1):
    for b in range(1,int(n**0.5)+1):
        for c in range(1,int(n**0.5)+1):
            if (a*a)+(b*b)+(c*c)+(a*b)+(b*c)+(c*a)==n:
                cnt+=1

print(cnt)
```

RESULT

3BK

0087

23CL

3BK
3BR

0087
0087

23CL
23CL

3BR
3P