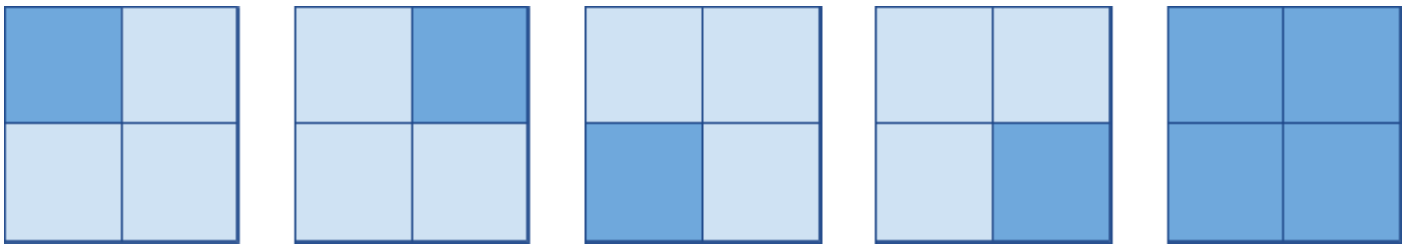
Feynman

Problem :

Richard Phillips Feynman was a well known American physicist and a recipient of the Nobel Prize in Physics. His life-long addiction was solving and making puzzles, locks, and ciphers.

Recently, an old farmer in South America, who was a host to the young physicist in 1949,found some papers and notes that are believed to have belonged to Feynman. Among notes about mesons and electromagnetism, there was a napkin where he wrote a simple puzzle: "How many different squares are there in a grid of N ×N squares?"

In the same napkin there was a drawing which is reproduced below, showing that, for N=2, the answer is 5.



Input :

The input contains several test cases. Each test case is composed of a single line,

containing only one integer N, representing the number of squares in each side of the grid ($1 \leq N \leq 100$).

The end of input is indicated by a line containing only one zero.

Output :

For each test case in the input, your program must print a single line, containing the

number of different squares for the corresponding input.

Sample :

Input :

2 //Number Of Test Cases

1

8

0

Output (According to the input):

5

1

204

Time Limit :

5 seconds.

Scoring :

There will be 10 test cases, and you will get 10 marks for each correct output

Constraints :

1 <= N <= 100