

# Counting Squares

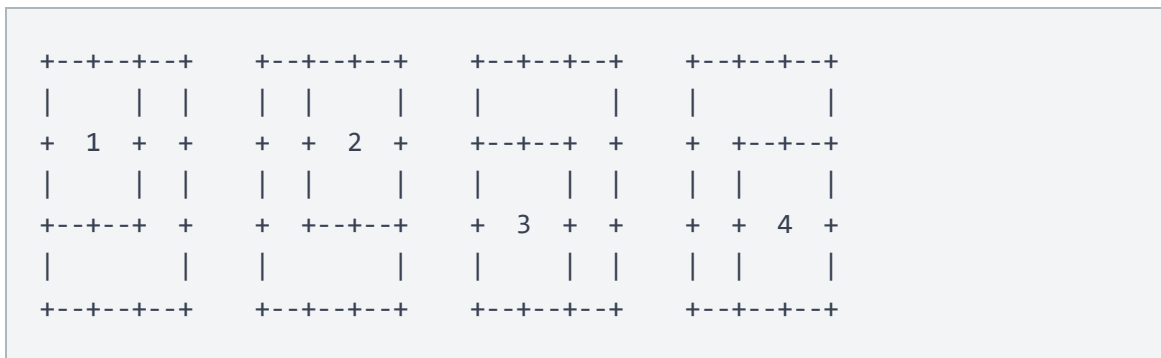
[oj.dcs.upd.edu.ph/problem/countingsquares](https://oj.dcs.upd.edu.ph/problem/countingsquares)

## Problem Statement

Given positive integers  $n$  and  $k$ , how many  $k \times k$  squares are there in an  $n \times n$  grid?

For example, a  $3 \times 3$  square contains four  $2 \times 2$  squares:

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## Task Details

Your task is to implement a function named `num_subsquares`, which should look like this:

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```
def num_subsquares(n, k):
    return ...
```

Here, you only need to replace the `...` part with a **Python expression**.

The function must return an integer denoting the answer.

Your source code must have at most 100100 bytes.

## Examples

Example 1 Function Call

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```
num_subsquares(3, 2)
```

**Example 1 Return Value**

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**Constraints**

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- The function `num_subsquares` will be called at most  $10410^4$  times.
- $1 \leq k \leq n \leq 10201 \leq k \leq n \leq 10^{20}$

**Scoring**

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**Note:** New tests may be added and all submissions may be rejudged at a later time. (All future tests will satisfy the constraints.)

- You get 5050 ❤️ points if you solve all test cases where:
  - $k=1$
- You get 5050 ❤️ points if you solve all test cases where:
  - $k \leq 2$
- You get 100100 ❤️ points if you solve all test cases.

[Report an issue](#)**Clarifications**

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No clarifications have been made at this time.