

Counting Squares

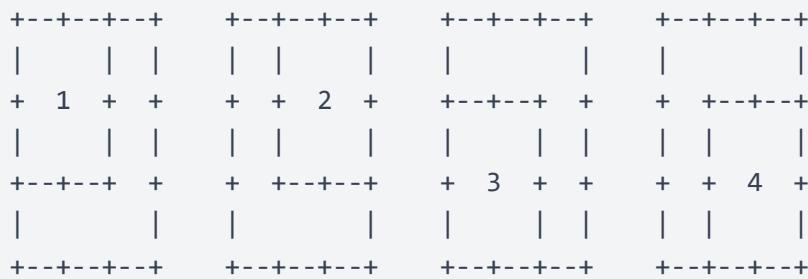
oj.dcs.upd.edu.ph/problem/countingsquares

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 3×3 square contains four 2×2 squares:

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Task Details

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

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```
def num_subquares(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_subsqares(3, 2)
```

Example 1 Return Value

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```
4
```

Constraints

- The function `num_subsqares` will be called at most $104 \cdot 10^4$ times.
- $1 \leq k \leq n \leq 1020$ $1 \leq k \leq n \leq 10^{20}$

Scoring

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.

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Clarifications

No clarifications have been made at this time.