

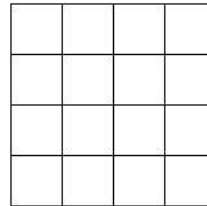
**DWITE Online Computer Programming Contest  
November 2004**

**Problem 2**

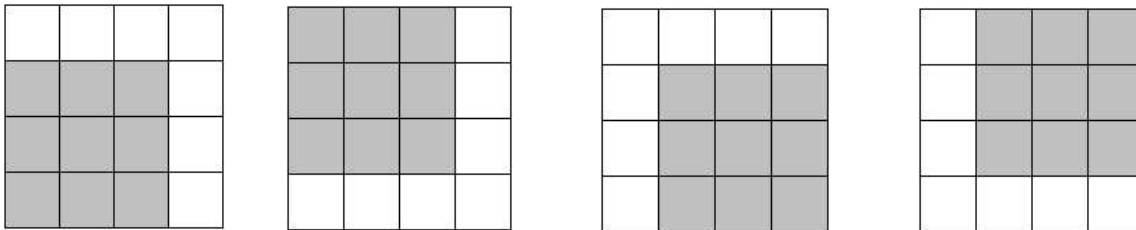
**Squareland**

Squareland is an imaginary new country that is in the shape of a square. The country is divided into lots of one square unit each.

If Squareland had 16 lots it would be shaped like this:



Matt and Hilda, a newlywed couple from Ireland, are the first people to immigrate to Squareland, and they wish to purchase some lots and grow potatoes on them. Now, since this is Squareland, they can only purchase lots that form a square. They decided to buy 9 lots, but now realized they had 4 choices of 9 lots to choose from.



Your job is to calculate the number of choices,  $C$ , of  $S$  lots, that Matt and Hilda have, from Squareland whose size is  $N$  lots.

The input file (**DATA21.txt** for the first submission and **DATA22.txt** for the second submission) will contain five sets of data. Each set will contain two lines of data, the first line will be  $N$ , a perfect square,  $0 < N \leq 100,000,000$  and the second line will be  $S$ , a perfect square,  $0 < S \leq N$ .

The output file (**OUT21.txt** for the first submission and **OUT22.txt** for the second submission) will contain  $C$ , the number of choices that Matt and Hilda have.

| <u>Sample Input (Only three sets given)</u> | <u>Sample Output</u> |
|---|----------------------|
| 16  | 4                    |
| 9   | 16                   |
| 16  | 1                    |
| 1   |                      |
| 4   |                      |
| 4   |                      |