Sum of Squares

We are interested in how many different sequences of N non negative integers there are that have the sum of their squares less than S. Note that the sequence (1, 2) is different from the sequence (2, 1).

Input

The input consists of only one line with two integers N ($0 < N < 30$) and S ($S < 100$).

Output

A single integer representing the number of different sequences that have the sum of their squares less than S.

Example

Input:
1 4

Output:
2