



Problem I
Internet Service Providers

Input File: I.IN

Output File: standard output

Program Source File: I.C, I.CPP, I.JAVA

A group of N Internet Service Provider companies (ISPs) use a private communication channel that has a maximum capacity of C traffic units per second. Each company transfers T traffic units per second through the channel and gets a profit that is directly proportional to the factor $T(C - TN)$. The problem is to compute T_{optim} , the smallest value of T that maximizes the total profit the N ISPs can get from using the channel. Notice that N , C , T , and T_{optim} are integer numbers.

Write a program that reads sets of data from an input text file. Each data set corresponds to an instance of the problem above and contains two integral numbers – N and C – with values in the range from 0 to 10^9 . The input data are separated by white spaces, are correct, and terminate with an end of file. For each data set the program computes the value of T_{optim} according to the problem instance that corresponds to the data set. The result is printed on the standard output from the beginning of a line. There must be no empty lines on the output. An example of input/output is shown below.

Input	Output
1 0	0
0 1	0
4 3	0
2 8	2
3 27	4
25 1000000000	20000000