

# This Time I Will Be Lucky

Input file: *standard input*  
Output file: *standard output*  
Time limit: 5 seconds  
Memory limit: 1024 mebibytes

In a casino, there is a bag with  $a$  white balls and  $b$  black balls. Until the bag is empty, we can pick one ball randomly from the bag, and if it is white, we gain 1 dollar; otherwise, we lose 1 dollar. After that, we trash this ball. We can stop at any time, including the time before picking any balls. What maximum expected profit can we get?

## Input

The input contains two space-separated integers,  $a$  and  $b$  ( $0 \leq a, b \leq 100\,000$ ).

## Output

Print one real number: the maximum expected profit. The answer will be considered correct if the absolute or relative error is at most  $10^{-6}$ .

## Examples

<i>standard input</i>	<i>standard output</i>
0 0	0
3 4	0.342857142857142857
2 2	0.666666666666666666
3 0	3

## Note

Don't forget `setprecision` if you use C++.