

10346 Peter's Smokes (Edited)

Peter has n cigarettes. He smokes them one by one keeping all the butts. Out of k > 1 butts he can roll a new cigarette.

How many cigarettes can Peter have?

Input

Input is a sequence of lines. In a line contain one integer number n, and the next line contain one integer number k.

Output

For each input, output one integer number giving the máximum number of cigarettes that Peter can have.

Sample Input 1

4

3

Sample Output 1

5

Sample Input 2

10

3

Sample Output 2

14

Sample Input 3

100

_

Sample Output 3

124