

Chips

Input file: *standard input*
Output file: *standard output*
Time limit: 2 seconds
Memory limit: 512 mebibytes

Programmer Vasiliy bought k cans of chips, with n chips in each can. Now he is watching a movie and eating chips. After each minute of the movie, our hero takes one of the cans and eats a chip from it.

At a certain moment, Vasiliy took one of the cans, but there were no chips left in it. What is the minimum and maximum number of minutes that could have passed since the start of the movie?

Input

The input consists of a single line containing two integers k and n separated by a space: the number of cans of chips and their size, respectively ($1 \leq k, n \leq 50$).

Output

Output two integers separated by a space: the minimum and maximum number of minutes that could have passed before Vasiliy took a can without chips.

Examples

<i>standard input</i>	<i>standard output</i>
3 4	5 13
49 15	16 736