

G Game Night Groups

Time limit: 2s

You are hosting a game night with many friends, where each table has a group playing Fables & Perilous Caverns (FPC). FPC is a game that can be played with at least x and at most y players. To make the game night start smoothly as soon as all your friends have arrived, you want to know beforehand whether they can be split into groups such that each group can play FPC.

As an example, consider the second sample input, where groups should have between 5 and 7 players. If you would have 18 friends, you could split them into three groups, as visualized in Figure G.1. It can be shown that no valid arrangement exists for 9 people. With strictly more than 9 people, it is always possible to host the game night where everybody can play FPC.

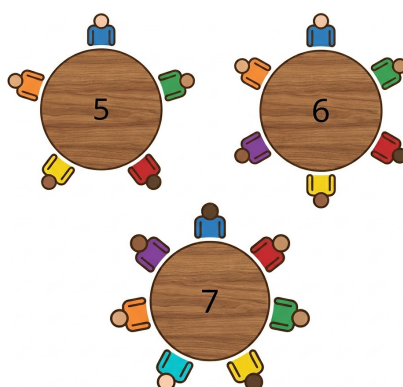


Figure G.1: A possible arrangement for 18 people when $x = 5$ and $y = 7$. Image generated using Gemini.

You want to make sure that you invite enough people so that nobody is left out. What is the largest number of friends that can *not* be split into groups with the required sizes to play FPC?

Input

The input consists of:

- One line with two integers x and y ($2 \leq x < y \leq 10^6$), indicating that the groups must have at least x and at most y people.

Output

Output the largest number of people that can *not* be split into groups with these size constraints.

It is guaranteed that under the input constraints such a number always exists.

Sample Input 1

Sample Output 1

4 6	7
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Sample Input 2

5 7

Sample Output 2

9

Sample Input 3

67 69

Sample Output 3

2210
