In many table-top games it is common to use different dice to simulate random events. A "d" or "D" is used to indicate a die with a specific number of faces, d4 indicating a four-sided die, for example. If several dice of the same type are to be rolled, this is indicated by a leading number specifying the number of dice. Hence, 2d6 means the player should roll two six-sided dice and sum the result face values.



Write a program to compute the most likely outcomes for the sum of two dice rolls. Assume each die has numbered faces starting at 1 and that each face has equal roll probability.

Input

The input file contains several test cases, each of them as described below.

The input consists of a single line with two integer numbers, N, M, specifying the number of faces of the two dice.

Constraints:

 $4 \le N, M \le 20$ Number of faces.

Output

For each test case, a line with the most likely outcome for the sum; in case of several outcomes with the same probability, they must be listed from lowest to highest value in separate lines.

The outputs of two consecutive cases will be separated by a blank line.

Sample Input

6 6

6 4

12 20

Sample Output

7

5

6 7

13

14

15 16

17

18

19

20

21