

Read a matrix dimension, and print the matrix filled with consecutive numbers starting from one(1).

The first cell (0,0) must have the number 1.

The last cell (n,m) must have the value  $n \times m$  (The largest number).

All others will be filled diagonally, left bottom to right top.

For example

Input:

3

4

Output:

1	3	6	9
2	5	8	11
4	7	10	12

Input

3

3

Output

1	3	6
2	5	8
4	7	9

Explanation

