Pascal Triangle

Input file:	standard input
Output file:	standard output
Time limit:	1 second
Memory limit:	256 megabytes

Given a number N. Print first N rows of **pascal** triangle.

Input

Only one line contains a number N ($1 \le N \le 30$).

Output

Print first N rows of **pascal** triangle.

Examples

standard input	standard output
3	1 1 1 1 2 1
4	1 1 1 1 2 1 1 3 3 1

Note

For more information visit **pascal triangle**:

https://www.mathsisfun.com/pascals-triangle.html .