## Pascal's Triangle

For a given integer $K$, print the first $K$ rows of Pascal's Triangle. Print each row with each value separated by a single space. The value at the $n^{t h}$ row and $r^{t h}$ column of the triangle is equal to $n!/(r!*(n-r)!)$ where indexing starts from 0 . These values are the binomial coefficients.

## The Pascal Triangle

```
1
1 1
1 2 1
1 3 31
14641
```


## Input Format

A single line of input, integer $K$.

## Constraints

$2<=K<=10$

## Output Format

Output the first $K$ rows of Pascal's triangle.

## Sample Input

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## Sample Output

```
1
1
2 1
1 3 3 1
```

