

Pascal's triangle

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[English version](#)

For given integer n , your task will be to print n th line of Pascal's triangle.

1 - 0th line

1 1 - 1st line

1 2 1 - 2nd line

1 3 3 1 - 3rd line

1 4 6 4 1 - 4th line

...

Input

The first line of the standard input contains one integer t ($t < 101$) which is the number of test cases.

In each of the next t lines there is one integer n ($0 \leq n < 101$).

Output

For each n , print n th line of Pascal's triangle.

Example

Input:

2

7

0

Output:

1 7 21 35 35 21 7 1

1