## Statement

1

1 1

2 1

1 2 1 1

1 1 1 2 2 1

3 1 2 2 1 1

...

Warning! This sequence can make you ill. The reasoning is simple but unusual: Read a line aloud whilst looking at the line above and you will notice that each line (except the first) makes ​​an inventory of the previous line.

Line 3 shows 2 1 because the line 2 contains two 1, one after the other.  
Line 4 displays 1 2 1 1 because the line 3 contains a one 2 followed by a one 1.  
Line 5 displays 1 1 1 2 2 1 because the line 4 contains a one 1 followed by a one 2 followed by a two 1.

This sequence refers to a technique used to encode ranges in order to compress identical values ​​without losing any information. This type of method is used, amongst others, to compress images.

Your mission is to write a program that will display the line L of this series on the basis of an original number R (R equals 1 in our example).

**INPUT:**

**Line 1:** The original number R of the sequence.

**Line 2:** The line L to display. The index of the first line is 1.

**OUTPUT:**The line L of the sequence. Each element of the sequence is separated by a blank space.

**CONSTRAINTS:**

0 < R < 100  
0 < L ≤ 25

**EXAMPLE:**

**Input**

1  
6

**Output**

3 1 2 2 1 1