## Problem 1 – Pyramid

You are a given **pyramid** of **integer** numbers**.** Your task is to print a **growing sequence** of integers, starting from the top of the pyramid. For example, we are given the following pyramid:

**2**  
 **5**  8  
4 **9** 10

The first number from the top is **2**. Going bottom, on the second row, the closest number larger than 2 is **5**. On the third row, the closest number larger than 5 is **9**. The resulting sequence is **{2, 5, 9}**.

If a row does not contain a number larger than the previous one, we go to the next row and search for a number greater than the **previous number + 1**. For example:

**6**  
 5 3  
4 **9** 7

The first number is **6**. On the second row we **have no number greater than 6**, so we go to the next row, where we look for **the nearest number larger than 7 (6 + 1 = 7**), which is **9**. The resulting sequence is **{6, 9}**.

### Input

The input will be read from the console.

* On the first line, you will get the number of lines **N**.
* On the next **N** you will get the rows of the pyramid. The numbers in each row are separated by one or more spaces. There will be a different number of spaces at the beginning of each line.

The input data will always be valid and in the format described. There is no need to check it explicitly.

### Output

### Print on the console all numbers of the sequence separated by a comma and a space.

### Constraints

* The first row will contain only 1 number.
* The rows of the pyramid will be in the range [2 … 1000].
* The numbers in the pyramid will be integers in the range [-2147483648 … 2147483647].
* Time limit: 0.3 sec. Memory limit: 16 MB.

### Examples

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| 3  2  5 8 4 9 10 | 2, 5, 9 |  | 3  6  5 3 4 9 10 | 6, 9 |  | 5  6  11 9  5 5 5  0 0 0 0  9 10 11 12 13 | 6, 9, 12 |