# Boxes



You're given a sequence of arrays where each array holds three integers and represents a box.

Theseintegers denote each box **width**, **depth**, and **height**, respectively. Your goal is to stack up the boxes and tomaximize the total height of the stack. A box must have a strictly **smaller width**, **depth**, and **height** than any other box below it.

Write a program that prints the boxes in the final stack, starting with the top box and ending with the bottom box. If several sequences with equal length exist, find the left-most of them.

## Input

* On the first you will receive an integer – boxes – number of boxes that you will receive.
* On the next boxes lines you will receive the width, depth, and height of a box in the following format: "{width} {depth} {height}".

## Output

* Print the boxes in the final stack, starting with the top box and ending with the bottom box.
  + Print each box in the following format: "{width} {depth} {height}".

## Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 6  2 1 2  3 2 3  2 2 8  2 3 4  1 3 1  4 4 5 | 2 1 2  3 2 3  4 4 5 |