Problem J. Judging the Trick

Input file:	`standard input`
Output file:	`standard output`
Time limit:	2 seconds
Memory limit:	512 megabytes

Tricky Ricky is a world-famous magician. He even claims that he can overcome the laws of physics and geometry.

In his latest trick he covers a $w \times h$ rectangle with n triangles fully contained within the rectangle. Sounds easy? But what would you say if he told you that the total area of those triangles is smaller than $w \cdot h$?

You are of that kind of people that are not very fun at parties and magic shows, so you want to prove him that this is impossible. Given a description of n triangles, find any point of the rectangle which does not belong to any triangle interior or border.

Input

The first line of the input contains three integers n, w and h ($1 \le n \le 100\,000$, $1 \le w, h \le 10\,000$) — the number of triangles and the dimensions of the rectangle.

The following n lines contain descriptions of triangle vertices. Each line contains six integers $x_{i,1}$, $y_{i,1}$, $x_{i,2}$, $y_{i,2}$, $x_{i,3}$ and $y_{i,3}$ ($0 \le x_{i,j} \le w$, $0 \le y_{i,j} \le h$). It is guaranteed that all given triangles are non-degenerate, and the total area of triangles is smaller than $w \cdot h$.

Output

Print two real numbers x and y ($0 \le x \le w$, $0 \le y \le h$) defining the coordinates of a point that lies strictly outside of all of the triangles. The numbers should be printed as decimal fractions with **at most** 9 digits after decimal point. Note that usage of exponential format **is not allowed**. Your answer will be considered correct if the given point does not belong to any triangle interior or border. Please, note that your answer will be verified with no absolute or relative tolerance.

It is guaranteed (by Euclid and some other guys) that such point always exists.

Example

standard input	standard output
5 4 3 0 0 3 0 0 2 3 3 0 1 0 3 1 1 3 1 2 3 3 0 4 0 4 3 4 3 3 2 4 1	1.1 1.6

Note

An illustration for the sample is given below.

