

1. CETVRTA

Mirko needs to choose four points in the plane so that they form a rectangle with sides parallel to the axes. He has already chosen three points and is confident that he hasn't made a mistake, but is having trouble locating the last point. Help him.

Input

Each of the three points already chosen will be given on a separate line. All coordinates will be integers between 1 and 1000.

Output

Output the coordinates of the fourth vertex of the rectangle.

Sample test data

input

5 5
5 7
7 5

output

7 7

input

30 20
10 10
10 20

output

30 10