Problem F
Four Square
Time Limit: 4 Seconds, Memory Limit: 2G

Inspired by a Piet Mondrian painting, you want to make a four-pane window out of four colored rectangles of glass. You are given the sizes of the four panes of glass. Can you arrange them into a square? You may rotate the panes. The panes should cover the entire square without overlap.

Input

The input consists of exactly four lines. Each of the four lines contains two integers w and h ($1 \leq w, h \leq 1{,}000$), representing the width and height of one of the four rectangular panes of glass.

Output

Output a single integer, which is 1 if the four panes can be arranged to form a square, and 0 otherwise.

Sample Input 1	Sample Output 1
1 1 1 1 1 1 1 1	1

Sample Input 2	Sample Output 2
3 1 3 3 2 2 3 3	0

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