

Problem E. Square Deal

Time Limit 1000 ms

Mem Limit 1048576 kB

OS Linux

Given the dimensions of three rectangles, determine if all three can be glued together, touching just on the edges, to form a square. You may rotate the rectangles. For example, Figure 1 shows successful constructions for the first two sample inputs.

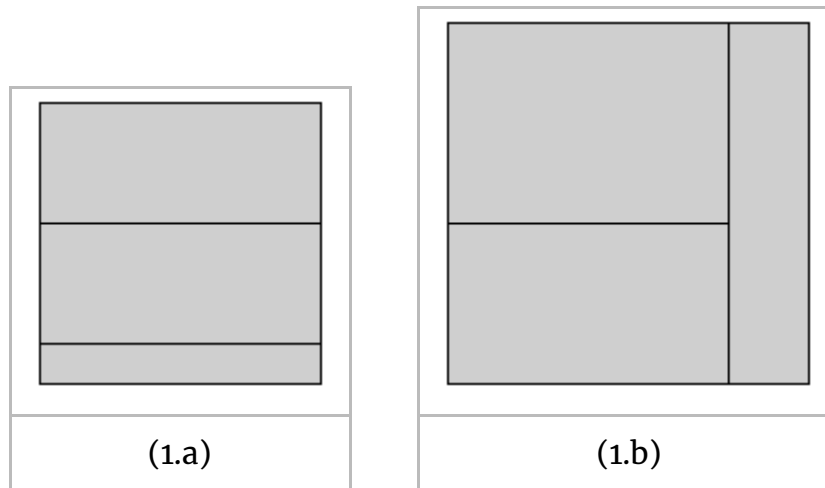


Figure 1: Constructions for the first two examples

Input

The input consists of three lines, with line j containing integers H_j and W_j , designating the height and width of a rectangle, such that $100 \geq H_j \geq W_j \geq 1$, and such that $H_1 \geq H_2 \geq H_3$.

Output

Output a line saying YES if they can be glued together to form a square. Output NO otherwise.

Sample 1

Input	Output
7 3 7 1 7 3	YES

Sample 2

Input	Output
9 2 7 4 7 5	YES

Sample 3

Input	Output
3 1 3 2 3 3	NO