

Square Deal

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 C.1 shows successful constructions for the first two sample inputs.

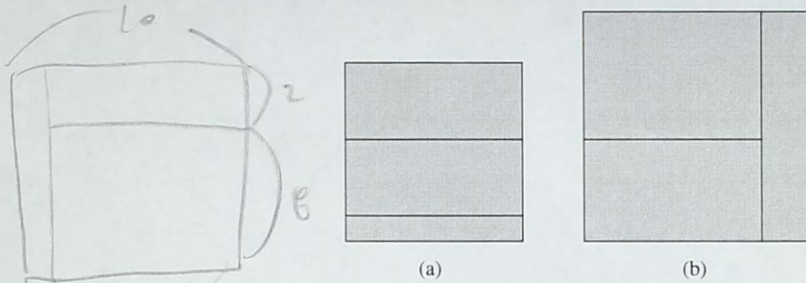


Figure C.1: Constructions for the first two examples

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 Input 1

```
7 3
7 1
7 3
```

Sample Output 1

YES

Sample Input 2

```
9 2
7 4
7 5
```

Sample Output 2

YES

Sample Input 3

```
3 1
3 2
3 3
```

Sample Output 3

NO