

Triathlon is an athletic contest consisting of three consecutive sections that should be completed as fast as possible as a whole. The first section is swimming, the second section is riding bicycle and the third one is running.

The speed of each contestant in all three sections is known. The judge can choose the length of each section arbitrarily provided that no section has zero length. As a result sometimes she could choose their lengths in such a way that some particular contestant would win the competition.

Input

Input consists of several datasets. The first line of each dataset contains integer number N ($1 \leq N \leq 100$), denoting the number of contestants. Then N lines follow, each line contains three integers V_i , U_i and W_i ($1 \leq V_i, U_i, W_i \leq 10000$), separated by spaces, denoting the speed of i -th contestant in each section.

Output

For each dataset and each contestant, write to the output one line, that contains word 'Yes' if the judge could choose the lengths of the sections in such a way that this particular contestant would win (i.e. she is the only one who would come first), or word 'No' if this is impossible.

Sample Input

```
9
10 2 6
10 7 3
5 6 7
3 2 7
6 2 6
3 5 7
8 4 6
10 4 2
1 8 7
```

Sample Output

```
Yes
Yes
Yes
No
No
No
Yes
No
Yes
```