Ordering the Team

There are **n** students who want to form a team for a contest. Each student has 3 skills - hard work, intelligence and persistence.

You want to check whether it is possible to order these people in such a way that for each **1** ≤ **i** ≤ **n-1**, $(i+1)^{th}$ person is stricly better than the i^{th} person.

A person **x** is said to be better than another person **y** if **x** doesn't score less than **y** in any of the skills and scores more than **y** in at least one skill.

Determine whether such an ordering exists.

Input Format

n

A_1, B_1, C_1

A_2, B_2, C_2

...

A_n, B_n, C_n

A_i, B_i, C_i denote the skills of the i^{th} person.

Constraints

1 <= **n** <= **10**

1 <= A_i, B_i, C_i <= **1000** for all valid i.

Output Format

Yes if a valid ordering is possible. Otherwise, **No**.

Sample Input 0

```
3
2 3 5
1 2 3
2 3 4
```

Sample Output 0

```
Yes
```

Explanation 0

Order the students as (1, 2, 3), (2, 3, 4), (2, 3, 5) and we are done.

Sample Input 1

```
3
1 2 3
```

```
2 3 4
2 3 4
```

Sample Output 1

```
No
```

Explanation 1

The second and third students cannot be ordered properly.

Contest ends in a day

Submissions: 188
Max Score: 40
Difficulty: Medium

Rate This Challenge:

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Current Buffer (saved locally, editable) C++14

```cpp
#include <cmath>
#include <cstdio>
#include <vector>
#include <iostream>
#include <algorithm>
using namespace std;


int main() {
    /* Enter your code here. Read input from STDIN. Print output to STDOUT */
    return 0;
}

```

Line: 1 Col: 1

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