Air Conditioner Temperature

Problem Code: **ACTEMP** | Contest Code: START52

Difficulty Rating: **584** | Show Tags

Problem

There are three people sitting in a room - Alice, Bob, and Charlie. They need to decide on the temperature to set on the air conditioner. Everyone has a demand each:

- Alice wants the temperature to be at least A degrees.
- Bob wants the temperature to be at most B degrees.
- Charlie wants the temperature to be at least C degrees.

Can they all agree on some temperature, or not?

Input Format

- The first line of input will contain a single integer T, denoting the number of test cases.
- Each test case consists of a single line which contains three integers - A, B, C.

Output Format

For each test case, output on a new line, "Yes" or "No". "Yes", if they can decide on some temperature which fits all their demands. Or "No", if no temperature fits all their demands.

- **Subtask 1 (10 points):** $1 \leq M \leq 10$
- **Subtask 2 (20 points):** The sum of N across all test cases won't exceed 20.
- **Subtask 3 (70 points):** No further constraints.

Sample 1:

Input	Output
4 30 35 25 30 35 40 30 35 35 30 25 35	Yes No Yes No

Explanation:

Test Case 1: Alice wants the temperature to be ≥ 30, Bob wants it to be ≤ 35, and Charlie wants it to be ≥ 25. The temperatures $30, 31, 32, 33, 34, 35$ all satisfy all their demands. So they can choose any of these 6 temperatures, and so the answer is "Yes".

Test Case 2: Alice wants the temperature to be ≥ 30, Bob wants it to be ≤ 35, and Charlie wants it to be ≥ 40. A number can't be both ≥ 40, and ≤ 35. So there is no temperature that satisfies all their demands. So the answer is "No".

Test Case 3: Alice wants the temperature to be ≥ 30, Bob wants it to be ≤ 35, and Charlie wants it to be ≥ 35. The temperature 35 satisfies all their demands. So the answer is "Yes".

Test Case 4: Alice wants the temperature to be ≥ 30, Bob wants it to be ≤ 25, and Charlie wants it to be ≥ 35. A number can't be both ≥ 30, and ≤ 25. So there is no temperature that satisfies all their demands. So the answer is "No".