

Chefland Games

In Chefland, a tennis game involves 4 referees.

Each referee has to point out whether he considers the ball to be inside limits or outside limits. The ball is considered to be **IN** if and only if **all** the referees agree that it was inside limits.

Given the decision of the 4 referees, help Chef determine whether the ball is considered inside limits 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 of input containing 4 integers R_1, R_2, R_3, R_4 denoting the decision of the respective referees.

Here R can be either 0 or 1 where 0 would denote that the referee considered the ball to be inside limits whereas 1 denotes that they consider it to be outside limits.

Output Format

For each test case, output **IN** if the ball is considered to be inside limits by all referees and **OUT** otherwise.

The checker is case-insensitive so answers like **in**, **In**, and **IN** would be considered the same.

Constraints

- $1 \leq T \leq 20$
- $0 \leq R_1, R_2, R_3, R_4 \leq 1$

Sample 1:

Input	
Output	
4 1 1 0 0 0 0 0 0 0 0 0 1 1 1 1 1	OUT IN OUT OUT

Explanation:

Test case 1: Referees 1 and 2 do not consider the ball to be **IN**. Thus, the ball is **OUT**.

Test case 2: All referees consider the ball to be **IN**. Thus, the ball is **IN**.

Test case 3: Referee 4 does not consider the ball to be **IN**. Thus, the ball is **OUT**.

Test case 4: No referee considers the ball to be **IN**. Thus, the ball is **OUT**.