

## Problem B. Is the Score Consistent

**Time Limit** 1000 ms

**Code Length Limit** 50000 B

**OS** Linux

Chef is watching a football match. The current score is  $A : B$ , that is, team 1 has scored  $A$  goals and team 2 has scored  $B$  goals. Chef wonders if it is possible for the score to become  $C : D$  at a later point in the game (i.e. team 1 has scored  $C$  goals and team 2 has scored  $D$  goals). Can you help Chef by answering his question?

### Input Format

- The first line contains a single integer  $T$  – the number of test cases. Then the test cases follow.
- The first line of each test case contains two integers  $A$  and  $B$  – the initial number of goals team 1 and team 2 have scored respectively.
- The second line of each test case contains two integers  $C$  and  $D$  – the final number of goals team 1 and team 2 must be able to score respectively.

### Output Format

For each testcase, output **POSSIBLE** if it is possible for the score to become  $C : D$  at a later point in the game, **IMPOSSIBLE** otherwise.

You may print each character of **POSSIBLE** and **IMPOSSIBLE** in uppercase or lowercase (for example, **possible**, **p0SsiBLE**, **Possible** will be considered identical).

### Constraints

- $1 \leq T \leq 1000$
- $0 \leq A, B, C, D \leq 10$

### Sample 1

Input	Output
3	POSSIBLE
1 5	IMPOSSIBLE
3 5	POSSIBLE
3 4	
2 6	
2 2	
2 2	

\*\*Test case 1:\*\* The current score is 1 : 5. If team 1 scores 2 more goals, the score will become 3 : 5. Thus 3 : 5 is a possible score.

**Test case 2:** The current score is 3 : 4. It can be proven that no non-negative pair of integers  $(x, y)$  exists such that if team 1 scores  $x$  more goals and team 2 scores  $y$  more goals the score becomes 2 : 6 from 3 : 4. Thus in this case 2 : 6 is an impossible score.

**Test case 3:** The current score is already 2 : 2. Hence it is a possible score.