Remove the Balls

There are n boxes with m_i balls in box i. Two players by turns must take away from a single box an arbitrary number of balls but at least one. You as one of the players start removing balls. If you take the last ball you lose.

Input

In the first line the number T of test cases (T<=100).
Then T lines with n (3<=n<=21) numbers m_i (0<m_i<100).

Output

For each test case **win** if you could win the game otherwise **lose**.

Example

Input:
3
1 1 1
1 1 2
1 1 1 1

Output:
lose
win
win