

Game of Square

A and B are playing a game. They are given a number N. They make moves in turn, A playing first. Each move consists of subtracting a perfect square(not less than 1) from the number, the player who faces 0 loses. You are given a number N, you have to find out whether A can win the game, if both A and B play optimally.

Input

The first line contains T - the number of test cases. The next T lines contain a number n.

Output

For each test case, print "Win" if A can win the game, or else print "Lose", separated by new line.

Constraints:

$T \geq 1$; $N \leq 10^5$

Example

Input:

5

1

2

3

16

10

Output:

Win

Lose

Win

Win

Lose