A. Squares or Circles

Program: squares.(cpp|java)

Input: squares.in

Balloon Color: red

Description

You are playing a game with your friend where you have a box full of square and circle shaped plastic pieces. In each move, a player can either take two circles, two squares, or one circle and one square. A player cannot take only one piece in a move. The winner is the player who makes the last move.

Given the number of squares and circles in the box, the player who starts first (you or your friend), and assuming that both of you play with optimal strategies, your task is to find out whether you will win or lose.

Input Format

The input starts with a number T ($1 \le T \le 1,000$) that represents the number of test cases in the file. Each test case consists of a line that starts with two integers S ($1 \le S \le 10^6$) and C ($1 \le C \le 10^6$) representing the number of squares and number of circles, respectively, followed by a single character that represents who starts the game. The character is 'M' if you start, and it is 'F' if your friend starts the game.

Output Format

The output for each test case is in this form:

k. ans

where *k* represents the test case number (starting at 1), and *ans* is either "I Win!", if you win, or "I Lose!", if your friend wins the game.

Sample Input / Output



