Time limit: 0.6s Memory limit: 64M

Mirko and his faithful friend Slavko got really bored one day. The result of their boredom is the creation of a new game! In the beginning of the game, they draw N points in a coordinate system. The players take turns and Mirko plays first. He draws a straight line which is parallel to one of the axes of the coordinate system and passes through one of the N points. In the following moves, the player draws a straight line which is parallel to one of the N points located on the line drawn in the previous move of the opponent. No single line must be drawn twice. The loser is the player who cannot play his move. Determine who has the winning strategy.

Input

The first and only line of input contains the positive integer N ($1 \le N \le 10\,000$).

Each of the following N lines contains two integers X and Y, the coordinates of the points drawn $(1 \le X, Y \le 500)$.

Output

The first and only line of output must contain the name of the winner, either Mirko or Slavko.

Scoring

In test cases worth 40% of total points, N will not exceed 10.

Sample Input 1

3			
1 1			
1 2			
1 3			

Sample Output 1

Mirko

Explanation for Sample Output 1

If Mirko draws the line y = 1, Slavko has to draw x = 1. Then Mirko draws the line y = 2, and Slavko's only remaining move is to draw x = 1 again, which isn't allowed.

Sample Input 2

4		
1 1		
1 2		
2 1		
2 2		

Sample Output 2

Slavko