Problem H. Game with the Stones

Input file: stdin
Output file: stdout
Time limit: 2 seconds
Memory limit: 256 megabytes

Constantine and Mike like to sort things out with the help of strange games. This time they play the following game: n stone piles, i-th of which contains a_i stones, lie on the table. Players move in rotation. Each player in his turn splits each pile that contains two or more stones into two non-empty parts. If before player's turn each pile contains exactly one stone, this player loses.

Constanting moves first. Determine who will win if both players play optimally.

Input

The first line contains the only integer n $(1 \le n \le 100)$ — number of stone piles on the table.

The second line contains n space-separated integers $a_1, \ldots, a_n \ (1 \le a_i \le 10^9)$ — numbers of stones in the piles.

Output

Write «Constantine» (without the quotes) if Constantine will win, and «Mike» (without the quotes) if the winner will be Mike.

Examples

stdin	stdout
4	Constantine
2 4 6 8	
4	Mike
7 5 3 1	