

Two-Player Game

Input file: **standard input**
Output file: **standard output**
Time limit: 2 seconds
Memory limit: 1024 megabytes

Insight and Maya are playing a game. Initially, they have an array $a = [a_1, a_2, \dots, a_n]$ of length n containing only positive integers. **Insight moves first**, and the two players take turns. In each round, the current player must perform the following steps:

1. Select an index i ($1 \leq i \leq n$) from the array such that $a_i > 0$;
2. For all indices j such that $j \neq i$, update a_j to $\min(a_j, a_i)$;
3. Subtract 1 from the value of a_i .

When it is a player's turn, if all elements in the array are 0 (in which case no positive number a_i can be selected), that player loses the game, and the other player wins. Assuming both players adopt optimal strategies to ensure their own victory, determine who will ultimately win the game.

Input

The first line contains an integer T ($1 \leq T \leq 10^4$), the number of test cases.

For each test case, the first line contains an integer n ($1 \leq n \leq 5 \times 10^5$), representing the length of the array.

The next line contains n positive integers a_1, a_2, \dots, a_n ($1 \leq a_i \leq 10^9$), representing the initial array.

It is guaranteed that the sum of n over all test cases does not exceed 2×10^6 .

Output

For each test case, output one line: if Maya has a strategy that allows her to win, output **Maya**; otherwise, output **Insight**.

Example

standard input	standard output
3	Insight
3	Insight
2 1 3	Maya
4	
2 1 3 1	
4	
2 1 1 4	