

Problem B. Sequential Nim

Time limit 1000 ms

Mem limit 262144 kB

There are n piles of stones, where the i -th pile has a_i stones. Two people play a game, where they take alternating turns removing stones.

In a move, a player may remove a positive number of stones from the **first non-empty pile** (the pile with the minimal index, that has at least one stone). The first player who cannot make a move (because all piles are empty) loses the game. If both players play optimally, determine the winner of the game.

Input

The first line contains a single integer t ($1 \leq t \leq 1000$) — the number of test cases. Next $2t$ lines contain descriptions of test cases.

The first line of each test case contains a single integer n ($1 \leq n \leq 10^5$) — the number of piles.

The second line of each test case contains n integers a_1, \dots, a_n ($1 \leq a_i \leq 10^9$) — a_i is equal to the number of stones in the i -th pile.

It is guaranteed that the sum of n for all test cases does not exceed 10^5 .

Output

For each test case, if the player who makes the first move will win, output "First". Otherwise, output "Second".

Sample 1

Input	Output
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Input	Output
7 3 2 5 4 8 1 1 1 1 1 1 1 1 6 1 2 3 4 5 6 6 1 1 2 1 2 2 1 1000000000 5 1 2 2 1 1 3 1 1 1	First Second Second First First Second First

Note

In the first test case, the first player will win the game. His winning strategy is:

1. The first player should take the stones from the first pile. He will take 1 stone. The numbers of stones in piles will be [1, 5, 4].
2. The second player should take the stones from the first pile. He will take 1 stone because he can't take any other number of stones. The numbers of stones in piles will be [0, 5, 4].
3. The first player should take the stones from the second pile because the first pile is empty. He will take 4 stones. The numbers of stones in piles will be [0, 1, 4].
4. The second player should take the stones from the second pile because the first pile is empty. He will take 1 stone because he can't take any other number of stones. The numbers of stones in piles will be [0, 0, 4].
5. The first player should take the stones from the third pile because the first and second piles are empty. He will take 4 stones. The numbers of stones in piles will be [0, 0, 0].
6. The second player will lose the game because all piles will be empty.