

Poker Nim is another **2**-player game that's a simple variation on a Nim game. The rules of the games are as follows:

- The game starts with n piles of chips indexed from 0 to $n - 1$. Each pile i (where $0 \leq i < n$) has c_i chips.
- The players move in alternating turns. During each move, the current player must perform *either* of the following actions:
 - Remove one or more chips *from* a single pile.
 - Add one or more chips *to* a single pile.

At least **1** chip must be added or removed during each turn.

- To ensure that the game ends in finite time, a player cannot add chips to any pile i more than k times.
- The player who removes the last chip wins the game.

Given the values of n , k , and the numbers of chips in each of the n piles, determine whether the person who wins the game is the *first* or *second* person to move. Assume both players move optimally.

Input Format

The first line contains an integer, T , denoting the number of test cases.

Each of the $2T$ subsequent lines defines a test case. Each test case is described over the following two lines:

1. Two space-separated integers, n (the number of piles) and k (the maximum number of times an individual player can add chips to some pile i), respectively.
2. n space-separated integers, c_0, c_1, \dots, c_{n-1} , where each c_i describes the number of chips at pile i .

Constraints

- $1 \leq T \leq 100$
- $1 \leq n, k \leq 100$
- $1 \leq c_i \leq 10^9$

Output Format

For each test case, print the name of the winner on a new line (i.e., either **First** or **Second**).

Sample Input

```
2
2 5
1 2
3 5
2 1 3
```

Sample Output

```
First
Second
```

