

## B Better Dice

Time limit: 1s

The latest Table-Top Role Playing Game is out now: *Better Dice*. Unlike all other TTRPGs, this one is all about dice. In fact, it is all about the *better die*: decisions are made, friendships gained and lost, fights fought, battles won, all based on who has the *better die*.

This game uses special  $n$ -sided dice where each of the  $n$  faces has the same probability of being rolled. Moreover, each die has its own special set of  $n$  numbers on the faces.

While playing *Better Dice* you ended up in a very precarious situation where you must absolutely have a *better die* than your opponent, that is, you must roll higher than your opponent. Given both your die and your opponent's die, decide who is more likely to roll a higher number.



A twenty-sided die with a special set of numbers on the faces. CC BY 4.0 by hamstermann on Thingiverse

### Input

The input consists of:

- One line with an integer  $n$  ( $1 \leq n \leq 1000$ ), the number of sides on each die.
- Two lines, each with  $n$  integers  $d$  ( $1 \leq d \leq 10^9$ ), the values on one of the dice.

### Output

Output “first” if the first die is more likely to roll a higher number than the second die.

Output “second” if the second die is more likely to roll a higher number than the first die.

Output “tie” if they are both equally likely to come up higher than the other.

#### Sample Input 1

2	tie
4 6	
5 5	

#### Sample Output 1

#### Sample Input 2

6	second
1 2 3 4 5 6	
7 6 5 4 3 2	

#### Sample Output 2

#### Sample Input 3

3	first
2 2 2	
1 1 8	

#### Sample Output 3