

## Grape Toss

At a local school event, students line up in pairs, with each pair facing inwards towards each other 1 meter apart. Then, the member of the pair on the left side throws a grape to the other person, who attempts to catch it in his or her mouth. If the grape is dropped, that pair is disqualified. However, if the grape is caught, the pair moves on to the next round. Each subsequent round, the pair moves 1 meter further apart, and the partner who threw in the last round takes a turn catching. The last team standing is victorious!

Not all players are equal. Each player has a maximum range that they can *catch* grapes from. If a grape is thrown to them from beyond this range, they will not catch it. However, any player can *throw* a fairly accurate grape from any range. The pair who successfully catches a grape at the furthest distance wins. You are given a list of pairs and their maximum catching range. Which pair will win?

### Input

The first line consists of one integer  $C$ ,  $1 \leq C \leq 100$ , the number of cases. For the next  $C$  cases, the first line consists of one integer  $N$ ,  $1 \leq N \leq 1000$ , the number of pairs taking part in the event. The next  $N$  lines consist of two integers  $p_L$  and  $p_R$ ,  $1 \leq p_L, p_R \leq 1000$ , the maximum catching ranges of the left and right partners.

### Output

Print the number of the team that is victorious from the order the teams were given in the input. In the case of a tie, print "tie". Put "Case #:" before each output, corresponding to the correct case number.

Sample Input 1:

```
1
4
1 3
2 6
4 7
2 1
```

Sample Output 1:

```
Case 1: 3
```

Sample Input 2:

```
2
3
1 3
2 6
2 4
2
1 3
2 1
```

Sample Output 2:

```
Case 1: tie
Case 2: 2
```