Dice

Gunnar and Emma play a lot of board games at home, so they own many dice that are not normal 6-sided dice. For example they own a die that has 10 sides with numbers $47, 48, ..., 56$ on it.

There has been a big storm in Stockholm, so Gunnar and Emma have been stuck at home without electricity for a couple of hours. They have finished playing all the games they have, so they came up with a new one.

Each player has 2 dice which he or she rolls. The player with a bigger sum wins. If both sums are the same, the game ends in a tie.

Given the description of Gunnar's and Emma's dice, which player has higher chances of winning?

All of their dice have the following property: each die contains numbers $a, a + 1, ..., b$, where a and b are the lowest and highest numbers respectively on the die. Each number appears exactly on one side, so the die has $b - a + 1$ sides.

Input

The first line contains four integers a_1, b_1, a_2, b_2 that describe Gunnar's dice. Dice number i contains numbers $a_i, a_i + 1, ..., b_i$ on its sides. You may assume that $1 \leq ai \leq bi \leq 100$. You can further assume that each die has at least four sides, so $a_i + 3 \leq b_i$.

The second line contains the description of Emma's dice in the same format.

Output

Output the name of the player that has higher probability of winning. Output "Tie" if both players have same probability of winning.

Sample Input 1

```
1 4 1 4
1 6 1 6
```

Sample Output 1

```
Emma
```

Sample Input 2

```
1 8 1 8
1 10 2 5
```

Sample Output 2

```
Tie
```

Sample Input 3

```
2 5 2 7
1 5 2 5
```

Sample Output 3

```
Gunnar
```