



## ☆ Find the Winner!



Andrea and Maria each have an array of  $n$  integers,  $andrea = [a_0, a_1, \dots, a_{n-1}]$  and  $maria = [m_0, m_1, \dots, m_{n-1}]$ , respectively. They decide to play the following game:

- At the beginning of the game, they decide if it's going to be an **Odd** game or an **Even** game.
- During each move:
  - They choose an array index,  $i$  (where  $0 \leq i < n$ ), that satisfies both of the following conditions:
    - Index  $i$  was not chosen during any prior move.
    - For **Even** games, index  $i$  must be an even number; for **Odd** games, it must be odd.
  - Andrea earns  $a_i - m_i$  points.
  - Maria earns  $m_i - a_i$  points.
- Once all the indices have been chosen, the game ends and whoever has the most points wins.

Complete the *winner* function in the editor. It has the following parameters:

Name	Type	Description
andrea	integer array	An array of $n$ integers denoting Andrea's array.
maria	integer array	An array of $n$ integers denoting Maria's array.
s	string	The string <b>Odd</b> if the game is odd, or <b>Even</b> if the game is even.

The function must return a string denoting the outcome of the game. Return **Andrea** if Andrea won, or return **Maria** if Maria won; if their scores are tied, return **Tie** instead.

### Input Format

The first line contains an integer,  $n$ , denoting the number of elements in *andrea*.

Each line  $i$  of the  $n$  subsequent lines (where  $0 \leq i < n$ ) contains an integer describing  $a_i$ .

The next line contains an integer,  $n$ , denoting the number of elements in *maria*.

Each line  $i$  of the  $n$  subsequent lines (where  $0 \leq i < n$ ) contains an integer describing  $m_i$ .

The next line contains string  $s$ .

### Constraints

- $2 \leq n \leq 10^5$
- $1 \leq a_i, m_i \leq 10^3$ , where  $0 \leq i < n$



Return a string denoting the outcome of the game. Return **Andrea** if Andrea won, or return **Maria** if Maria won; if their scores are tied, return **Tie** instead.

### Sample Input 0

```
3
1
2
3
3
2
1
3
Even
```

### Sample Output 0

```
Maria
```

### Explanation 0

In this game,  $andrea = [1, 2, 3]$  and  $maria = [2, 1, 3]$ . Because  $s = \text{Even}$ , the only indices we can choose during moves are in the set  $\{0, 2\}$ . The game proceeds like so:

- When  $i = 0$ , Andrea gets  $a_0 - m_0 = 1 - 2 = -1$  point and Maria gets  $m_0 - a_0 = 2 - 1 = 1$  point.
- When  $i = 2$ , Andrea gets  $a_2 - m_2 = 3 - 3 = 0$  points and Maria gets  $m_2 - a_2 = 3 - 3 = 0$  points.

When we sum the total number of points earned by both players, Andrea has  $-1 + 0 = -1$  point and Maria has  $1 + 0 = 1$  point. Because Maria has the most points, we return **Maria** as the winner.

### Sample Input 1

```
3
1
2
3
3
2
1
3
Odd
```



Andrea

**Explanation 1**

In this game,  $andrea = [1, 2, 3]$  and  $maria = [2, 1, 3]$ . Because  $s = Odd$ , the only indices we can choose during moves are in the set  $\{1\}$ . The game proceeds like so:

- When  $i = 1$ , Andrea gets  $a_1 - m_1 = 2 - 1 = 1$  point and Maria gets  $m_1 - a_1 = 1 - 2 = -1$  point.

When we sum the total number of points earned by both players, Andrea has 1 point and Maria has -1 point. Because Andrea has the most points, we return **Andrea** as the winner.

**YOUR ANSWER**

We recommend you take a quick tour of our editor before you proceed.  
The timer will pause up to 90 seconds for the tour.

[Start tour](#)

Original code

Java 7



```
1 ▶ import ↔;
6
7 public class Solution {
8
9 ▼ /*
10  * Complete the function below.
11  */
12
13 ▼ static String winner(int[] andrea, int[] maria, String s) {
14
15
16 }
17
18
19
20
21
22
23 ▶ public static void main(String[] args) throws IOException{↔
    }
```



Run Code

Submit code & Continue



(You can submit any number of times)

5

☐ Test against custom input

6

[Download sample test cases](#)

*Notepad to edit them on windows.*

*The input/output files have Unix line endings. Do not use*

7

8

9

[About](#) [Privacy Policy](#) [Terms of Service](#)

10

11

12

13

14

15

16

17

18

19

20

21

22

23