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Chef and Card Game

Problem Code: **CRDGAME**

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as well.

Chef is playing a card game with his friend Morty Smith.

The rules of the game are as follows:

- There are two piles of cards, pile A and pile B , each with N cards in it. Pile A belongs to Chef and pile B belongs to Morty.
- Each card has one positive integer on it
- The 'power' of a card is defined as the sum of digits of the integer on that card
- The game consists of N rounds
- In each round, both players simultaneously draw one card each from the top of their piles and the player who draws the card with higher power wins this round and gets a point. If the powers of both players' cards are equal then they get 1 point each.
- The winner of the game is the player who has more points at the end of N rounds. If both players have equal number of points then the game ends in a draw.

The game is now over and Chef has told Morty to find the winner. Unfortunately, this task is too complex for him. Help Morty find the winner.

Input:

- First line will contain T , number of testcases.
- The first line of each test case will contain N , the number of rounds played.
- The i^{th} of the next N lines of each test case will contain A_i and B_i , the number on the card drawn by Chef and Morty respectively in round i .

Output:

My Submissions

(/JULY20B/status/CRDGAME/jag20)

All Submissions

(/JULY20B/status/CRDGAME)

Successful Submissions



For each test case, output two space separated integers on a new line:

Output

- 0 if Chef wins,
 - 1 if Morty wins,
 - 2 if it is a draw,
- followed by the number of points the winner had.
(If it is a draw then output either player's points).

Constraints

- $1 \leq T \leq 1000$
- $1 \leq N \leq 100$
- $1 \leq A_i, B_i \leq 10^9$

Subtasks

- 100 points : No additional constraints

Sample Input:

```
2
3
10 4
8 12
7 6
2
5 10
3 4
```

Sample Output:

```
0 2
2 1
```

Explanation:

Test Case 1:

Round 1:

Chef's card has power $1 + 0 = 1$,
Morty's card has power 4.
Therefore, Morty wins the round.

Round 2:

Chef's card has power 8,
Morty's card has power $1 + 2 = 3$.
Therefore, Chef wins the round.

Round 3:

Chef's card has power 7,
Morty's card has power 6.
Therefore, Chef wins the round.

Therefore, Chef wins the game with 2 points (Morty has 1 point).

Test Case 2:

Round 1:

Chef's card has power 5,
Morty's card has power $1 + 0 = 1$.
Therefore, Chef wins the round.

Round 2:

Chef's card has power 3,
Morty's card has power 4.
Therefore, Morty wins the round.

Therefore, the game ends in a draw and both players have 1 point each.

Author: [aryanag_adm \(/users/aryanag_adm/\)](/users/aryanag_adm/)

Date Added: 2-07-2020

Time Limit: 1 secs

Source Limit: 50000 Bytes

Languages: ADA, ASM, BASH, BF, C, CAML, CLOJ, CLPS, COB, CPP14, CPP17, CS2, D, ERL, FORT, FS, GO, HASK, ICK, ICON, JAVA, JS, kotlin, LISP clisp, LISP sbcl, LUA, NEM, NICE, NODEJS, PAS fpc, PAS gpc, PERL, PERL6, PHP, PIKE, PRLG, PYP3, PYPY, PYTH, PYTH 3.6, R, RUBY, rust, SCALA, SCM chicken, SCM guile, SCM qobi, SQL, SQLQ, ST, swift, TCL, TEXT, WSPC

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