## 3002. Tournament

Two players are holding a darts tournament consisting of a series of  games. In each game, the participants make several throws and earn points. The winner of an individual game is the player who scores more points than the opponent. If both players score the same number of points, the game is considered a draw.

The winner of the tournament is the player who wins more games.

Write a program that determines the winner of the tournament.

**Input.** The first line contains one positive integer *n* (1 ≤ *n* ≤ 1000) – the number of games in the tournament. Each of the following *n* lines contains two non-negative integers – the number of points scored by the first and second players, respectively. All values do not exceed 1000.

**Output.** Print:

* the number 1, if the winner of the tournament is the first player;
* the number 2, if the winner is the second player;
* the number 0, if the tournament ends in a draw.

|  |  |
| --- | --- |
| **Sample input 1** | **Sample output 1** |
| 3  3 1  1 0  1 2 | 1 |
|  |  |
| **Sample input 2** | **Sample output 2** |
| 2  1 1  0 5 | 2 |

**SOLUTION**

**loops**

# Algorithm analysis

Let us declare two variables, *a* and *b*, representing the number of games won by the first and second players, respectively. For each game, increase *a* by one if the first player wins, and increase *b* by one if the second player wins.

After all *n* games are completed, compare the values of *a* and *b* and print the result.

# Algorithm implementation

Read the number of games *n*. Initialize the variables *a* and *b* with zeros – they will store the number of wins for each player.

scanf("%d",&n);

a = b = 0;

Read the results of *n* games and update the values of *a* and *b* according to the outcome of each game.

for(i = 0; i < n; i++)

{

scanf("%d %d",&x,&y);

if (x > y) a++;

if (x < y) b++;

}

After processing all the games, compare the number of wins of the players and print the final result.

if (a > b) puts("1"); else

if (a < b) puts("2"); else

puts("0");