

Problem 3238: Find the Number of Winning Players

Problem Information

Difficulty: Easy

Acceptance Rate: 60.17%

Paid Only: No

Tags: Array, Hash Table, Counting

Problem Description

You are given an integer `n` representing the number of players in a game and a 2D array `pick` where `pick[i] = [xi, yi]` represents that the player `xi` picked a ball of color `yi`.

Player `i` **wins** the game if they pick **strictly more** than `i` balls of the **same** color. In other words,

- * Player 0 wins if they pick any ball.
- * Player 1 wins if they pick at least two balls of the _same_ color.
- * ...
- * Player `i` wins if they pick at least `i + 1` balls of the _same_ color.

Return the number of players who **win** the game.

Note that _multiple_ players can win the game.

Example 1:

Input: n = 4, pick = [[0,0],[1,0],[1,0],[2,1],[2,1],[2,0]]

Output: 2

Explanation:

Player 0 and player 1 win the game, while players 2 and 3 do not win.

Example 2:

****Input:**** n = 5, pick = [[1,1],[1,2],[1,3],[1,4]]

****Output:**** 0

****Explanation:****

No player wins the game.

****Example 3:****

****Input:**** n = 5, pick = [[1,1],[2,4],[2,4],[2,4]]

****Output:**** 1

****Explanation:****

Player 2 wins the game by picking 3 balls with color 4.

****Constraints:****

* `2 <= n <= 10` * `1 <= pick.length <= 100` * `pick[i].length == 2` * `0 <= xi <= n - 1` * `0 <= yi <= 10`

Code Snippets

C++:

```
class Solution {
public:
    int winningPlayerCount(int n, vector<vector<int>>& pick) {
        }
};
```

Java:

```
class Solution {
public int winningPlayerCount(int n, int[][] pick) {
```

```
    }  
}
```

Python3:

```
class Solution:  
    def winningPlayerCount(self, n: int, pick: List[List[int]]) -> int:
```