

# Backend Development- Week3

## Week 3

### ▼ CP Question-

#### *Question- Find the Number of Winning Players*

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

A 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:** 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.

#### ▼ Coding Challenge-

- Find the smallest element in a list.
- Write a program that converts units (e.g., length, weight, temperature) between different measurement systems.
- Develop a system to manage a library's catalog, including adding books, checking out books, and returning books.