Problem 3450: Maximum Students on a Single Bench

Problem Information

Difficulty: Easy
Acceptance Rate: 87.28%
Paid Only: Yes
Tags: Array, Hash Table

Problem Description

You are given a 2D integer array of student data `students`, where `students[i] = [student_id, bench_id]` represents that student `student_id` is sitting on the bench `bench_id`.

Return the **maximum** number of _unique_ students sitting on any single bench. If no students are present, return 0.

Note : A student can appear multiple times on the same bench in the input, but they should be counted only once per bench.

Example 1:

Input: students = [[1,2],[2,2],[3,3],[1,3],[2,3]]

Output: 3

Explanation:

* Bench 2 has two unique students: `[1, 2]`. * Bench 3 has three unique students: `[1, 2, 3]`. * The maximum number of unique students on a single bench is 3.

Example 2:

Input: students = [[1,1],[2,1],[3,1],[4,2],[5,2]]

Output: 3

Explanation:

* Bench 1 has three unique students: `[1, 2, 3]`. * Bench 2 has two unique students: `[4, 5]`. * The maximum number of unique students on a single bench is 3.

Example 3:

Input: students = [[1,1],[1,1]]

Output: 1

Explanation:

* The maximum number of unique students on a single bench is 1.

Example 4:

Input: students = []

Output: 0

Explanation:

* Since no students are present, the output is 0.

Constraints:

* `0 <= students.length <= 100` * `students[i] = [student_id, bench_id]` * `1 <= student_id <= 100` * `1 <= bench_id <= 100`

Code Snippets

C++:

```
class Solution {
public:
```

```cpp
    int maxStudentsOnBench(vector<vector<int>>& students) {

    }
};
```

Java:

```java
class Solution {
public int maxStudentsOnBench(int[][] students) {

}
}
```

Python3:

```python
class Solution:
def maxStudentsOnBench(self, students: List[List[int]]) -> int:
```