

Problem 2432: The Employee That Worked on the Longest Task

Problem Information

Difficulty: Easy

Acceptance Rate: 51.11%

Paid Only: No

Tags: Array

Problem Description

There are `n` employees, each with a unique id from `0` to `n - 1`.

You are given a 2D integer array `logs` where `logs[i] = [id_i, leaveTime_i]` where:

* `id_i` is the id of the employee that worked on the `ith` task, and * `leaveTime_i` is the time at which the employee finished the `ith` task. All the values `leaveTime_i` are **unique**.

Note that the `ith` task starts the moment right after the `(i - 1)th` task ends, and the `0th` task starts at time `0`.

Return _the id of the employee that worked the task with the longest time._ If there is a tie between two or more employees, return _the**smallest** id among them_.

Example 1:

Input: n = 10, logs = [[0,3],[2,5],[0,9],[1,15]] **Output:** 1 **Explanation:** Task 0 started at 0 and ended at 3 with 3 units of times. Task 1 started at 3 and ended at 5 with 2 units of times. Task 2 started at 5 and ended at 9 with 4 units of times. Task 3 started at 9 and ended at 15 with 6 units of times. The task with the longest time is task 3 and the employee with id 1 is the one that worked on it, so we return 1.

Example 2:

Input: n = 26, logs = [[1,1],[3,7],[2,12],[7,17]] **Output:** 3 **Explanation:** Task 0 started at 0 and ended at 1 with 1 unit of times. Task 1 started at 1 and ended at 7 with 6 units of

times. Task 2 started at 7 and ended at 12 with 5 units of times. Task 3 started at 12 and ended at 17 with 5 units of times. The tasks with the longest time is task 1. The employee that worked on it is 3, so we return 3.

****Example 3:****

****Input:**** n = 2, logs = [[0,10],[1,20]] ****Output:**** 0 ****Explanation:**** Task 0 started at 0 and ended at 10 with 10 units of times. Task 1 started at 10 and ended at 20 with 10 units of times. The tasks with the longest time are tasks 0 and 1. The employees that worked on them are 0 and 1, so we return the smallest id 0.

****Constraints:****

$2 \leq n \leq 500$, $1 \leq \text{logs.length} \leq 500$, $\text{logs}[i].length == 2$, $0 \leq \text{id}_i \leq n - 1$, $1 \leq \text{leaveTime}_i \leq 500$, $\text{id}_i \neq \text{id}_{i+1}$, leaveTime_i are sorted in a strictly increasing order.

Code Snippets

C++:

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

Java:

```
class Solution {
public int hardestWorker(int n, int[][] logs) {
        }
}
```

Python3:

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