

# 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] = [idi, leaveTimei]` where:

\* `idi` is the id of the employee that worked on the  $i$ th task, and \* `leaveTimei` is the time at which the employee finished the  $i$ th task. All the values `leaveTimei` are **unique**.

Note that the  $i$ th task starts the moment right after the  $(i - 1)$ th task ends, and the  $0$ th 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:**  $n = 2$ ,  $\text{logs} = [[0,10],[1,20]]$  **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:**

$2 \leq n \leq 500$   $1 \leq \text{logs.length} \leq 500$   $\text{logs}[i].\text{length} == 2$   $0 \leq \text{id}_i \leq n - 1$   $1 \leq \text{leaveTime}_i \leq 500$   $\text{id}_i \neq \text{id}_{i+1}$   $\text{leaveTime}_i$  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:
```