

LeetCode

Description

Discussion (13)

Solutions (1.1K)

Submissions

123. Maximum Profit in Job Scheduling

Hard

4.7K

55

Companies

We have  $n$  jobs, where every job is scheduled to be done from  $startTime[i]$  to  $endTime[i]$ , obtaining a profit of  $profit[i]$ .

You're given the `startTime`, `endTime` and `profit` arrays, return the maximum profit you can take such that there are no two jobs in the subset with overlapping time range.

If you choose a job that ends at time  $X$ , you will be able to start another job that starts at time  $X$ .

**Example 1:**

profit = 40

profit = 10

profit = 50

profit = 70

123456

**Input:** `startTime = [1,2,3,3], endTime = [3,4,5,6], profit = [50,10,40,70]`  
**Output:** 120  
**Explanation:** The subset chosen is the first and fourth job.  
Time range  $[1-3]+[3-6]$ , we get profit of  $120 = 50 + 70$ .

**Example 2:**

profit = 20

profit = 20

profit = 70

profit = 100

profit = 60

time 12345678910

**Input:** `startTime = [1,2,3,4,6], endTime = [3,5,10,6,9], profit = [20,20,100,70,60]`  
**Output:** 150  
**Explanation:** The subset chosen is the first, fourth and fifth job.  
Profit obtained  $150 = 20 + 70 + 60$ .

**Example 3:**

profit = 4

profit = 6

profit = 5

time 1234

**Input:** `startTime = [1,1,1], endTime = [2,3,4], profit = [5,6,4]`  
**Output:** 6

**Constraints:**

- $1 \leq startTime.length == endTime.length == profit.length \leq 5 * 10^4$
- $1 \leq startTime[i] < endTime[i] \leq 10^9$
- $1 \leq profit[i] \leq 10^4$

Accepted 171.9K

Submissions 321K

Acceptance Rate 53.5%

Seen this question in a real interview before?

1/4

Yes

No

Similar Questions

Related Topics

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Problem List

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Java

Auto

```
1 class Solution {
2     public int jobScheduling(int[] startTime, int[] endTime, int[] profit) {
3
4     }
5 }
```

Console

Run

Submit