

5233. Maximum Profit in Job Scheduling

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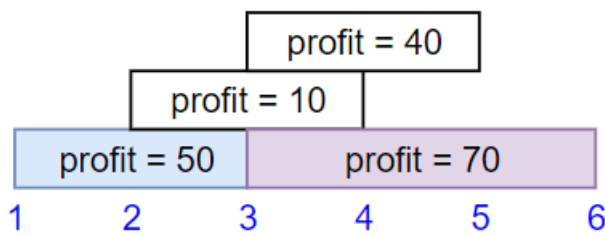
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We have n jobs, where every job is scheduled to be done from $startTime[i]$ to $endTime[i]$, obtaining a profit of $profit[i]$.

You're given the $startTime$, $endTime$ and $profit$ arrays, you need to output the maximum profit you can take such that there are no 2 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:



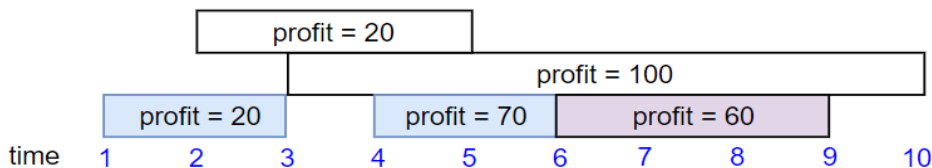
Input: $startTime = [1,2,3,3]$, $endTime = [3,4,5,6]$, $profit = [50,10,40,70]$

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:



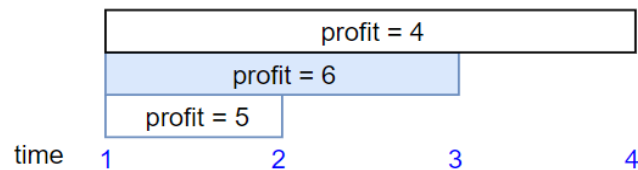
Input: $startTime = [1,2,3,4,6]$, $endTime = [3,5,10,6,9]$, $profit = [20,20,100,70,60]$

Output: 150

Explanation: The subset chosen is the first, fourth and fifth job.

Profit obtained $150 = 20 + 70 + 60$.

Example 3:



Input: $startTime = [1,1,1]$, $endTime = [2,3,4]$, $profit = [5,6,4]$

Output: 6

Constraints:

- $1 \leq startTime.length == endTime.length == profit.length \leq 5 * 10^4$

User Accepted:	344
User Tried:	560
Total Accepted:	362
Total Submissions:	907
Difficulty:	Hard

- $1 \leq \text{startTime}[i] < \text{endTime}[i] \leq 10^9$
- $1 \leq \text{profit}[i] \leq 10^4$

C++



```
1 class Solution {  
2 public:  
3     int jobScheduling(vector<int>& startTime, vector<int>& endTime, vector<int>& profit) {  
4  
5     }  
6 };
```

☐ Custom Testcase

Run

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