1352. Maximum Profit in Job Scheduling

Difficulty : Hard

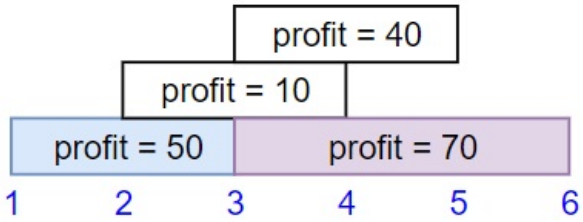
https://leetcode.com/problems/maximum-profit-in-job-scheduling

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.

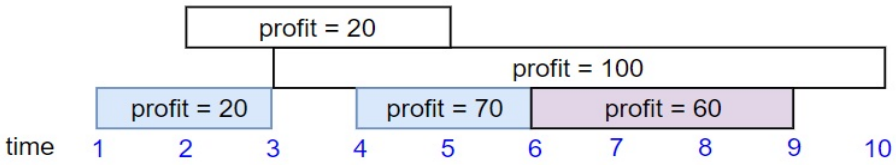
If you choose a job that ends at time `X` you will be able to start another job that starts at time `X`.

Example 1:



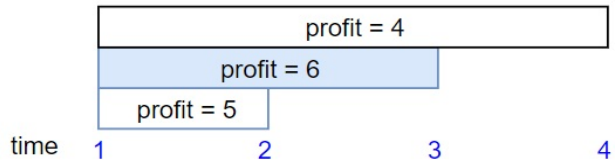

```
Input: startTime = [1,2,3,3], endTime = [3,4,5,6], profit = [50,10,40,70]
Output: 120
Explanation: The subset chosen is the first and fourth job.
Time range [1-3]+[3-6] , we get profit of 120 = 50 + 70.
```

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