

Editorial - Quarantine Centers

Input data and calculate the amount of money that can be raised each flight at the same time.

Use a [2d vector](#) to store the data of each flight in the format of {arrival_date, quarantine_finishing_date, amount_of_money}

Sort the flight data in the non descending order of the quarantine_finishing_date of each flight.

[Dynamic programming](#) is used to solve this problem.

An array is used to store the maximum amount of money that can be raised by considering up to i th flight(inclusive) in the i th index of the array

Initially amount of money from **0th** flight is stored in the index **0**

1. Each flight from **1** to **$n-1$** , is considered in a loop. In each iteration,
 - a. Take the amount of money from i th flight (take as '**amount**')
 - b. Find the latest prior flight with a 'quarantine_finishing_date' (take as j) that doesn't conflict with the 'arrival_date' of the i th flight.
 - c. If there is a flight j (There can be situation with no non-conflicting flights)* then add the value in index j of array (which is the max possible amount of money raised by considering up to j th flight) to the '**amount**'
 - d. Then get the maximum amount by comparing **maximum amount of index $i-1$** and '**amount**' and assign in to the i th index of the array
 - e. In the end of loop max amount of money that can be raised by considering all flights will be in the last index of the array