

# Mock CCO '19 Contest 2 Problem 6 - A Fundraising Problem

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**Time limit:** 1.0s    **Memory limit:** 162M

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$N$  people want to donate money to DMOJ. Each person has one person that they hate though, so they will not donate money if the person they hate donates to DMOJ.

Compute the maximum amount of money that DMOJ can receive.

## Constraints

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$$1 \leq N \leq 10^6$$

$$a_i \leq 10^6$$

## Input Specification

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The first line contains a single integer,  $N$ .

The next  $N$  lines contain two space-separated integers. The first is the amount of money person  $i$  will donate,  $a_i$ . The second is the index of the person they hate, which will be one-indexed.

## Output Specification

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Output the desired total.

## Sample Input

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```
3
10 2
20 3
30 1
```

## Sample Output

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```
30
```