Loud and Rich

Try to solve the Loud and Rich problem.

We'll cover the following

Statement

You're given a group of people where everyone has a specific amount of money and a different level of quietness. Additionally, you're given an array `richer` = $[x_i, y_i]$, so that x_i has more money than y_i. The quietness level of each person is represented using an array named `quiet`.

Return an integer array `res`, where `res[i]` = `y` if `y` has the lowest value in `quiet[y]` among all people who have equal or more money than the person `i`.

Constraints:

- $n =$ `quiet.length`
- $1 \leq n \leq 500$
- $0 \leq$ `quiet[i]` $< n$
- All the values of `quiet` are unique.
- $0 \leq$ `richer.length` $\leq n * (n-1)/2$
- $0 \leq$ `x[i]`, `y[i]` $<$ `n`
- $x_i \; ! = y_i$
- All the pairs of `richer` are unique.
- The observations in `richer` are all logically consistent.

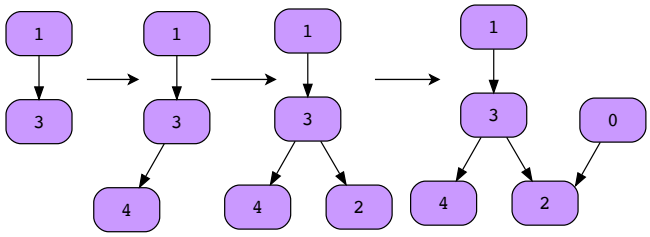
Example

Sample example 1

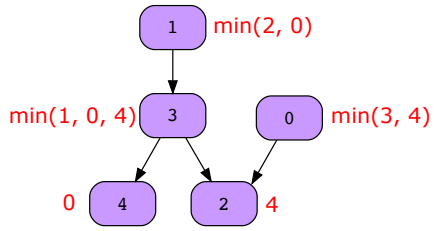
Input

richer	[3, 1]	[4, 3]	[2, 3]	[2, 0]

quiet	3	2	4	1	0



Representing first node as child and second one as parent in richer pair.



Find the minimum quiet value for each parent node with its descendants and append in resultant array the person with that value. For leaf nodes, simply append the same node in resultant array.

Output

res	0	4	2	4	4

Understand the problem

Let's take a moment to make sure you've correctly understood the problem. The quiz below helps you check if you're solving the correct problem:

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1 What is the output if the following arrays are given as input?

richer = [[0, 5],[1, 6],[2, 1],[3, 1],[4, 6],[5, 1],[6, 8],[7, 4],[9, 4]]

quiet = [8, 5, 4, 1, 0, 9, 2, 3, 6, 7]

A) [0, 3, 2, 3, 4, 0, 4, 7, 4, 9]

B) [0, 1, 2, 3, 4, 0, 4, 7, 4, 9]

C) [0, 3, 2, 3, 4, 5, 6, 7, 4, 9]

D) [0, 1, 2, 3, 4, 0, 4, 7, 4, 9]

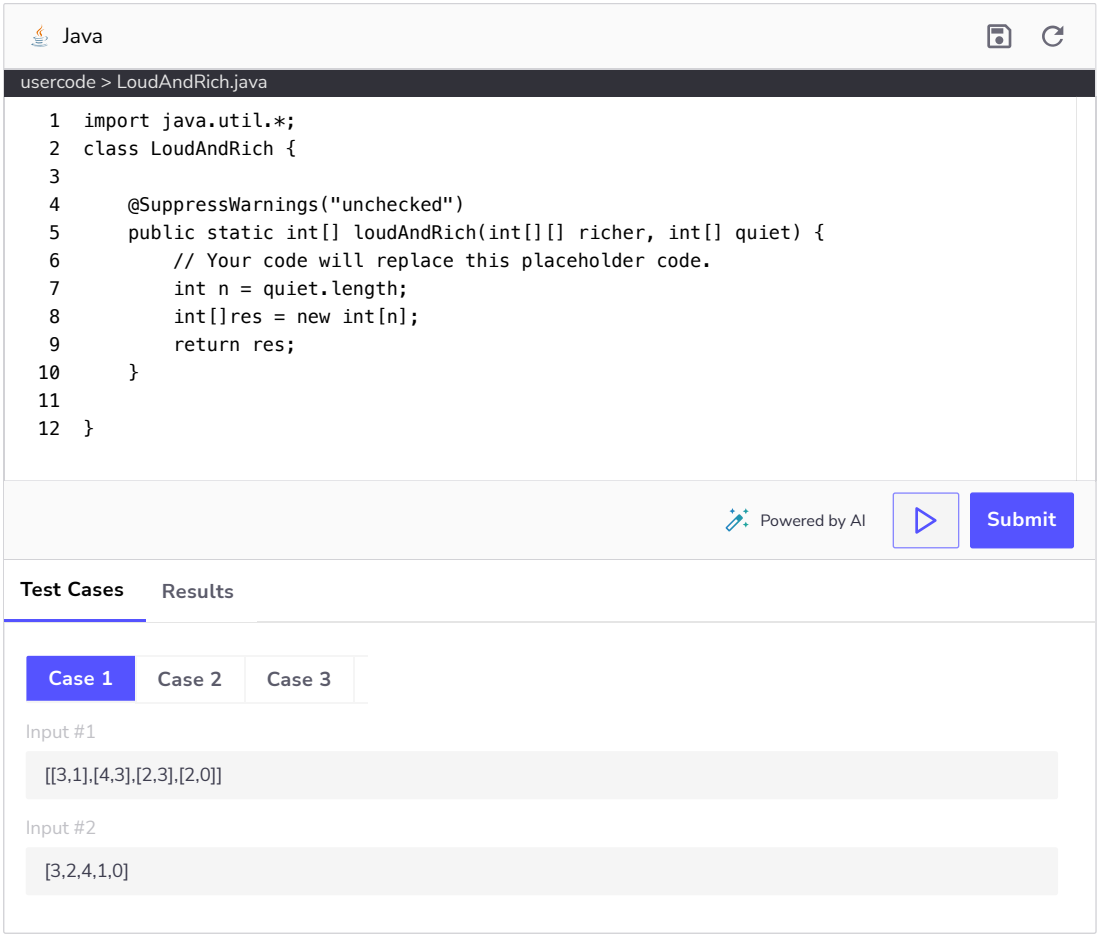
Submit Answer

0 attempted

Reset Quiz

Try it yourself

Implement your solution in the following coding playground:



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Hide Hint