

Full Name: Yan Victor Email: ybritogomes@gmail.com Test Name: **Mock Test** Taken On: 11 Mar 2023 00:30:13 IST Time Taken: 23 min 56 sec/ 30 min Linkedin: https://www.linkedin.com/in/yan-victor-brito-gomes-999243257/ Invited by: Ankush Invited on: 11 Mar 2023 00:30:03 IST Skills Score: Tags Score: Algorithms 0/90 Constructive Algorithms 0/90 Core CS 0/90 Greedy Algorithms 0/90 0/90 Medium

Problem Solving

problem-solving

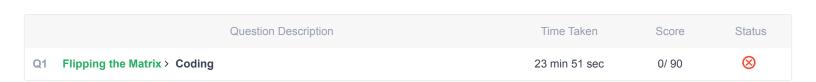
0/90

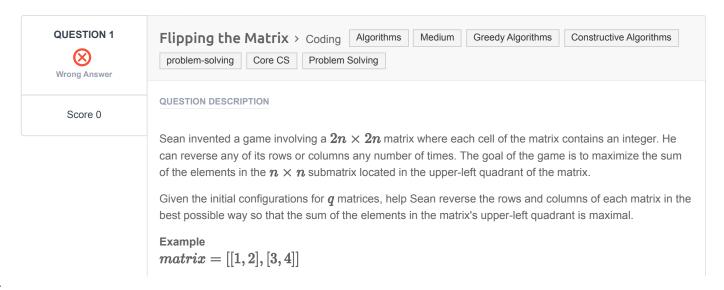
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0% scored in Mock Test in 23 min 56 sec on 11 Mar 2023 00:30:13 IST

Recruiter/Team Comments:

No Comments.





```
1 2
3 4
```

It is 2×2 and we want to maximize the top left quadrant, a 1×1 matrix. Reverse row 1:

```
1 2
4 3
```

And now reverse column 0:

```
4 2
1 3
```

The maximal sum is 4.

Function Description

Complete the *flippingMatrix* function in the editor below.

flippingMatrix has the following parameters:

- int matrix[2n][2n]: a 2-dimensional array of integers

Returns

- int: the maximum sum possible.

Input Format

The first line contains an integer q, the number of queries.

The next q sets of lines are in the following format:

- The first line of each query contains an integer, n.
- Each of the next 2n lines contains 2n space-separated integers matrix[i][j] in row i of the matrix.

Constraints

- $1 \le q \le 16$
- $1 \le n \le 128$
- $0 \leq matrix[i][j] \leq 4096$, where $0 \leq i,j < 2n$.

Sample Input

Sample Output

```
414
```

Explanation

Start out with the following 2n imes 2n matrix:

$$matrix = egin{bmatrix} 112 & 42 & 83 & 119 \ 56 & 125 & 56 & 49 \ 15 & 78 & 101 & 43 \ 62 & 98 & 114 & 108 \ \end{bmatrix}$$

Perform the following operations to maximize the sum of the n imes n submatrix in the upper-left quadrant:

2. Reverse column 2 ([83, 56, 101, 114] ightarrow [114, 101, 56, 83]), resulting in the matrix:

$$matrix = egin{bmatrix} 112 & 42 & 114 & 119 \ 56 & 125 & 101 & 49 \ 15 & 78 & 56 & 43 \ 62 & 98 & 83 & 108 \ \end{bmatrix}$$

3. Reverse row 0 ([112, 42, 114, 119] ightarrow [119, 114, 42, 112]), resulting in the matrix:

$$matrix = egin{bmatrix} 119 & 114 & 42 & 112 \ 56 & 125 & 101 & 49 \ 15 & 78 & 56 & 43 \ 62 & 98 & 83 & 108 \end{bmatrix}$$

The sum of values in the n imes n submatrix in the upper-left quadrant is 119+114+56+125=414

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CANDIDATE ANSWER

Language used: TypeScript

```
1 'use strict';
3 import { WriteStream, createWriteStream } from "fs";
4 process.stdin.resume();
5 process.stdin.setEncoding('utf-8');
7 let inputString: string = '';
8 let inputLines: string[] = [];
9 let currentLine: number = 0;
process.stdin.on('data', function(inputStdin: string): void {
      inputString += inputStdin;
13 });
process.stdin.on('end', function(): void {
     inputLines = inputString.split('\n');
      inputString = '';
     main();
20 });
22 function readLine(): string {
     return inputLines[currentLine++];
24 }
28 function flippingMatrix(matrix: number[][], n: number): number {
      console.log(matrix);
      return 0;
32 }
34 function main() {
      const ws: WriteStream = createWriteStream(process.env['OUTPUT PATH']);
```

```
const q: number = parseInt(readLine().trim(), 10);

for (let qItr: number = 0; qItr < q; qItr++) {
    const n: number = parseInt(readLine().trim(), 10);

let matrix: number[][] = Array(2 * n);

for (let i: number = 0; i < 2 * n; i++) {
    matrix[i] = readLine().replace(/\s+$/g, '').split('
    ').map(matrixTemp => parseInt(matrixTemp, 10));

}

const result: number = flippingMatrix(matrix, n);

ws.write(result + '\n');
}

ws.end();
}
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Sample case	Wrong Answer	0	0.0705 sec	30.2 KB
Testcase 2	Easy	Hidden case	Wrong Answer	0	0.1645 sec	44.9 KB
Testcase 3	Easy	Hidden case	Wrong Answer	0	0.2171 sec	54.4 KB
Testcase 4	Easy	Hidden case	Wrong Answer	0	0.1612 sec	45.4 KB
Testcase 5	Easy	Hidden case	Wrong Answer	0	0.1882 sec	53.2 KB
Testcase 6	Easy	Hidden case	Wrong Answer	0	0.1652 sec	54 KB
Testcase 7	Easy	Hidden case	Wrong Answer	0	0.1825 sec	55 KB
Testcase 8	Easy	Sample case	Wrong Answer	0	0.0492 sec	30.4 KB
o Comments						

No Comments

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