

Mock Test > yashuuu930@gmail.com

Full Name: Yashavantha Kumara H O Email: yashuuu930@gmail.com Test Name: **Mock Test** Taken On: 13 Aug 2025 07:23:46 IST Time Taken: 24 min 52 sec/ 40 min Invited by: Ankush 13 Aug 2025 07:22:48 IST Invited on: Skills Score: Tags Score: Algorithms 160/195 Constructive Algorithms 90/90 Core CS 160/195 Easy 70/105 Greedy Algorithms 90/90 Medium 90/90 Problem Solving 160/195 Search 70/105 Sorting 70/105 problem-solving 160/195

scored in **Mock Test** in 24 min 52 sec on 13 Aug 2025 07:23:46 IST

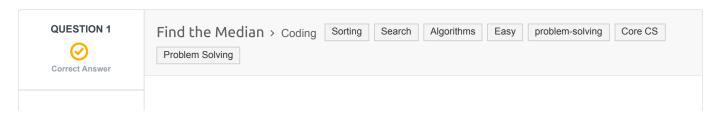
Recruiter/Team Comments:

No Comments.

Plagiarism flagged

We have marked questions with suspected plagiarism below. Please review it in detail here -

	Question Description	Time Taken	Score	Status
Q1	Find the Median > Coding	7 min 10 sec	70/ 105	⊘
Q2	Flipping the Matrix > Coding	17 min 23 sec	90/ 90	(!)



The median of a list of numbers is essentially its middle element after sorting. The same number of elements occur after it as before. Given a list of numbers with an odd number of elements, find the median?

Example

$$arr = [5, 3, 1, 2, 4]$$

The sorted array arr'=[1,2,3,4,5]. The middle element and the median is 3.

Function Description

Complete the findMedian function in the editor below.

findMedian has the following parameter(s):

• int arr[n]: an unsorted array of integers

Returns

• int: the median of the array

Input Format

The first line contains the integer n, the size of arr.

The second line contains n space-separated integers arr[i]

Constraints

- $1 \le n \le 1000001$
- **n** is odd
- $-10000 \le arr[i] \le 10000$

Sample Input 0

```
7
0 1 2 4 6 5 3
```

Sample Output 0

3

Explanation 0

The sorted arr = [0, 1, 2, 3, 4, 5, 6]. It's middle element is at arr[3] = 3.

CANDIDATE ANSWER

Language used: C

```
mid=j;
             }
             int temp=a[i];
             a[i]=a[mid];
             a[mid]=temp;
        printf("%d\n", a[n/2]);
        return 0;
25 }
   TESTCASE DIFFICULTY
                            TYPE
                                             STATUS
                                                              SCORE
                                                                         TIME
                                                                                    MEMORY
                                                                        TAKEN
                                                                                      USED
   Testcase 1
                 Easy
                           Sample
                                            Success
                                                                 0
                                                                       0.0065 sec
                                                                                     7.25 KB
                            case
   Testcase 2
                 Easy
                         Hidden case
                                            Success
                                                                35
                                                                      0.0509 sec
                                                                                     7.38 KB
   Testcase 3
                 Easy
                         Hidden case
                                            Success
                                                                35
                                                                      0.0391 sec
                                                                                     7.25 KB
   Testcase 4
                 Easy
                         Hidden case
                                                                 0
                                                                       2.0033 sec
                                                                                     6.88 KB

    Terminated due to

                                              timeout
No Comments
```

NO Comment





Needs Review

Score 90



QUESTION DESCRIPTION

Sean invented a game involving a $2n \times 2n$ matrix where each cell of the matrix contains an integer. He can reverse any of its rows or columns any number of times. The goal of the game is to maximize the sum of the elements in the $n \times n$ submatrix located in the upper-left quadrant of the matrix.

Given the initial configurations for q matrices, help Sean reverse the rows and columns of each matrix in the best possible way so that the sum of the elements in the matrix's upper-left quadrant is maximal.

Example

 $matrix = \left[\left[1, 2 \right], \left[3, 4 \right] \right]$

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 ${f 4}$.

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, $oldsymbol{n}$.
- 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 $2n \times 2n$ 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 $n \times n$ submatrix in the upper-left quadrant:

2. Reverse column 2 ([83, 56, 101, 114] \rightarrow [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] \rightarrow [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: C

```
1 #include<stdio.h>
2 int main(){
     int q;
4
     scanf("%d", &q);
     while(q--){
        int n;
        scanf("%d", &n);
8
         int S= n*2;
         int mat[S][S];
         for(int i=0; i<S; i++)
             for(int j=0; j<S; j++){
14
                 scanf("%d", &mat[i][j]);
             }
         }
          long sum=0;
         for (int i =0;i<n; i++)
         {
              for(int j=0; j<n; j++) {
                 int a= mat[i][j];
                 int b= mat[i][S-j-1];
                 int c= mat[S-i-1][j];
                 int d= mat[S-i-1][S-j-1];
                 int max = a;
                 if(b>max) max=b;
                 if(c>max) max=c;
                 if(d>max) max=d;
                 sum +=max;
         }
        printf("%ld\n", sum);
34
      return 0;
37 }
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Sample case	Success	0	0.0099 sec	7.5 KB
Testcase 2	Easy	Hidden case	Success	15	0.0343 sec	7.63 KB
Testcase 3	Easy	Hidden case	Success	15	0.052 sec	7.5 KB
Testcase 4	Easy	Hidden case	Success	15	0.023 sec	7.38 KB
Testcase 5	Easy	Hidden case	Success	15	0.0392 sec	7.75 KB
Testcase 6	Easy	Hidden case	Success	15	0.0384 sec	7.63 KB
Testcase 7	Easy	Hidden case	Success	15	0.0451 sec	7.5 KB
Testcase 8	Easy	Sample case	Success	0	0.0079 sec	7.25 KB

No Comments