Practice (/)

LIVE BATCHES

Rotate a 2D array without using extra space

Submissions: 4790 (/problem_submissions.php?pid=497)　Accuracy: 57.32%　Difficulty: Medium (https://practice.geeksforgeeks.org/Medium/0/0/)　Marks: 4

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You are given an n x n 2D matrix representing an image.

Rotate the image by 90 degrees (clockwise).

You need to do this in place.

Note that if you end up using an additional array, you will only receive partial score.

Example:

If the array is

1 2 3 4 5 6 7 8 9

Then the rotated array becomes:

7 4 1 8 5 2 9 6 3

Input:

The first line contains an integer 'T' denoting the total number of test cases.
In each test cases, the first line contains an integer 'N' denoting the size of the 2D square matrix.

And in the second line, the elements of the matrix A[][], each separated by a space in row major form.

Output:

For each test case, print the elements of the rotated array row wise, each element separated by a space. Print the output of each test case in a new line.

Constraints:

1 ≤ T ≤ 70
1 ≤ N ≤ 10
1 ≤ A [i][j] ≤ 100

Example:

Input:

2
3
1 2 3 4 5 6 7 8 9
2
56 96 91 54

Output:

7 4 1 8 5 2 9 6 3
91 56 54 96

** For More Input/Output Examples Use 'Expected Output' option **

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```cpp
1  #include <iostream>
2  using namespace std;
3
4  int main() {
5      //code
6      int t, n, size;
7      cin>>t;
8      for (int i=0; i<t; i++) {
9          cin>>n;
10         int *a;
11         size=n*n;
12         a = new int[size];
13         for (int j = 0; j<size; j++){
14             cin>>a[j];
15         }
16
17         for (int j=0; j<n; j++){
18             for (int k=1; k<=n; k++){
19                 cout<<a[size - n*k + j]<<" ";
20             }
21         }
22
23         cout<<endl;
24     }
```
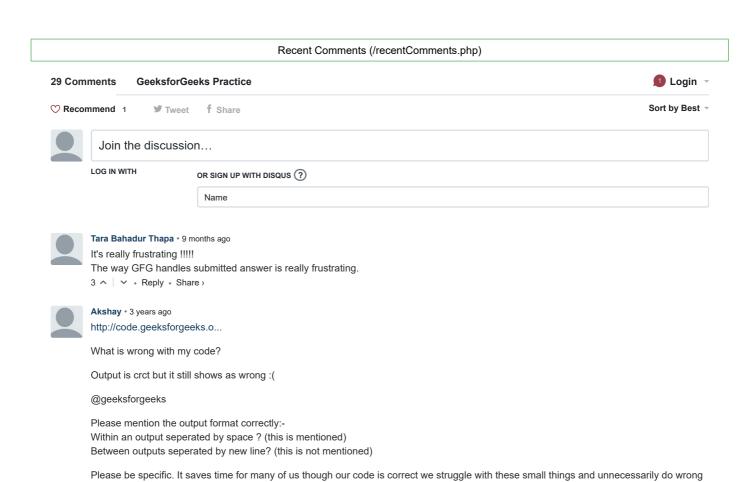
☐ Test against custom input

Expected Outcome   Compile & Test   Submit

Correct Answer. ✅
Execution Time:0.01

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LIVE BATCHES

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　　It's really frustrating !!!!!
　　The way GFG handles submitted answer is really frustrating.
　　3 ⌃ | ⌄ • Reply • Share ›

👤　**Akshay** • 3 years ago
　　http://code.geeksforgeeks.o...

　　What is wrong with my code?

　　Output is crct but it still shows as wrong :(

　　@geeksforgeeks

　　Please mention the output format correctly:-
　　Within an output seperated by space ? (this is mentioned)
　　Between outputs seperated by new line? (this is not mentioned)

　　Please be specific. It saves time for many of us though our code is correct we struggle with these small things and unnecessarily do wrong
　　submissions.
　　2 ⌃ | ⌄ • Reply • Share ›

👤　**Shikhar** Mod ↱ Akshay • 3 years ago
　　Thank you for your feedback. We have updated the problem statement.