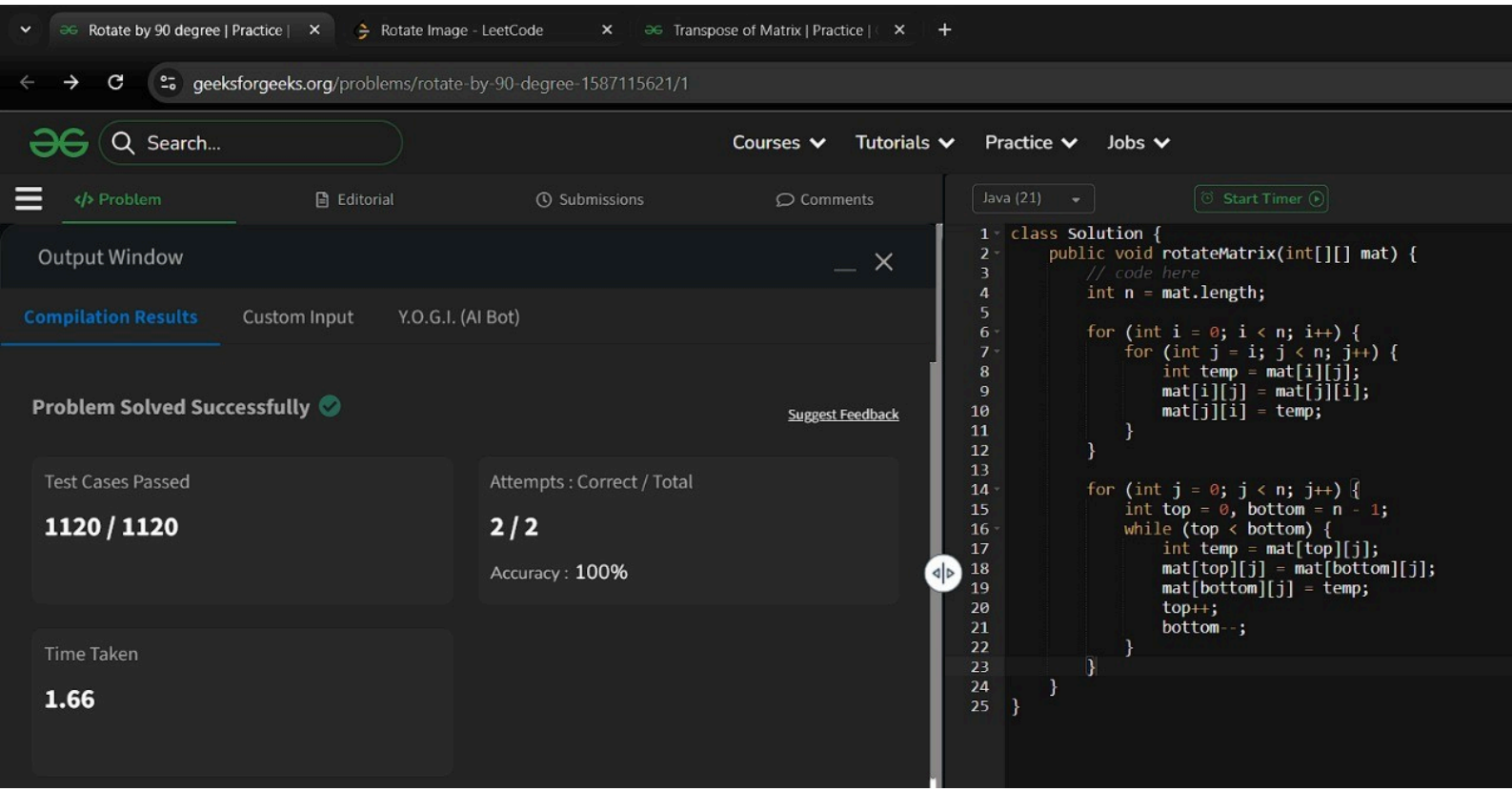
```java
/*Transpose of Matrix  */
import java.util.Scanner;
public class Common{
    Run | Debug
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.print("Enter number of rows: ");
        int rows = sc.nextInt();

        System.out.print("Enter number of columns: ");
        int cols = sc.nextInt();

        int[][] matrix = new int[rows][cols];
        int[][] transpose = new int[cols][rows];

        System.out.print("Enter matrix elements:");
        for (int i = 0; i < rows; i++) {
            for (int j = 0; j < cols; j++) {
                matrix[i][j] = sc.nextInt();
            }
        }

        for (int i = 0; i < rows; i++) {
            for (int j = 0; j < cols; j++) {
                transpose[j][i] = matrix[i][j];
            }
        }

        System.out.println("Transpose of the matrix:");
        for (int i = 0; i < cols; i++) {
            for (int j = 0; j < rows; j++) {
                System.out.print(transpose[i][j] + " ");
            }
            System.out.println();
        }
    }
}
```

```java
/*Transpose of matrix without using new matrix */
import java.util.Scanner;
public class Common {
    Run | Debug
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);

        int n = sc.nextInt();

        int[][] matrix = new int[n][n];

        System.out.println("Enter elements:");
        for (int i = 0; i < n; i++) {
            for (int j = 0; j < n; j++) {
                matrix[i][j] = sc.nextInt();
            }
        }

        for (int i = 0; i < n; i++) {
            for (int j = i + 1; j < n; j++) {
                int temp = matrix[i][j];
                matrix[i][j] = matrix[j][i];
                matrix[j][i] = temp;
            }
        }

        System.out.println("Transpose of matrix:");
        for (int i = 0; i < n; i++) {
            for (int j = 0; j < n; j++) {
                System.out.print(matrix[i][j] + " ");
            }
            System.out.println();
        }

    }
}
```


Rotate by 90 degree | Practice |
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Transpose of Matrix | Practice |
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Problem Solved Successfully
Suggest Feedback
Test Cases Passed
1120 / 1120
Attempts : Correct / Total
2 / 2
Accuracy : 100%
Time Taken
1.66
class Solution {
public void rotateMatrix(int[][] mat) {
// code here
int n = mat.length;
for (int i = 0; i < n; i++) {
for (int j = i; j < n; j++) {
int temp = mat[i][j];
mat[i][j] = mat[j][i];
mat[j][i] = temp;
}
}
for (int j = 0; j < n; j++) {
int top = 0, bottom = n - 1;
while (top < bottom) {
int temp = mat[top][j];
mat[top][j] = mat[bottom][j];
mat[bottom][j] = temp;
top++;
bottom--;
}
}
}
}

Rotate by 90 degree | Practice | Transpose of Matrix | Practice | Rotate Image - LeetCode

leetcode.com/problems/rotate-image/

Problem List

Submit

Description | Accepted | Editorial | Solutions | Submissions

All Submissions

Accepted 21 / 21 testcases passed

Abhay Fulara submitted at Sep 16, 2025 15:10

Editorial | Solution

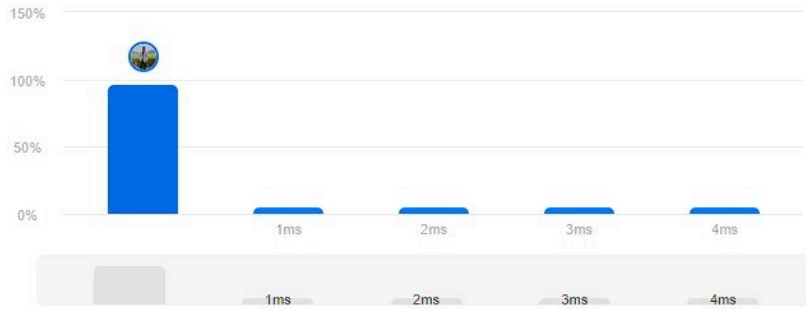
Runtime

0 ms | Beats 100.00%

Analyze Complexity

Memory

42.39 MB | Beats 41.96%



Code | Java

Code

Java | Auto

```java
class Solution {
    public void rotate(int[][] matrix) {
        int n = matrix.length;

        for (int i = 0; i < n; i++) {
            for (int j = i; j < n; j++) {
                int temp = matrix[i][j];
                matrix[i][j] = matrix[j][i];
                matrix[j][i] = temp;
            }
        }

        for (int i = 0; i < n; i++) {
            int left = 0, right = n - 1;
            while (left < right) {
                int temp = matrix[i][left];
                matrix[i][left] = matrix[i][right];
                matrix[i][right] = temp;

                left++;
                right--;
            }
        }
    }
}
```