Lab2
Deadline: In lab on Sep 28

Requirements

lab2.c skeleton file is provided for you. Write a function that rotates a 2D array of integers. The signature of the function is:

```
void rotateArray(int arr[10][10], int n, int rows, int cols);
```

You need to implement a function that rotates this array by an angle specified by the command line argument. The input array size is limited to 10x10. You could get an input that is smaller than 10x10. You will always get an input size that will fit in 10x10.

Here is a 5x5 example of the input:

```
11111
11111
22222
22222
33333
```

Here is the output of running the input file through your program when it is rotated 90 degrees. In this case, integer n in the function parameter is 90. Assume that the rotation is always in the clockwise direction.

```
32211
32211
32211
32211
32211
```

You will be guaranteed to have an input that is in squares. Only digits 1-9 will be used in this lab.

How to Compile and Run

```
gcc lab2.c -o < output executable>
./<executable> <input file> <angle>
```

Now you will be able to see the output on your console.

Restrictions

- You are not allowed to write any additional `printf` statement anywhere in the file.
- You are not allowed to modify any part of the code except rotateArray function and `a_num` variable.
- If you have any doubt, ask me during the lab session.

Grading

Any grading failure due to not following instructions will result in 0.

- (1 point) All files are submitted correctly using the instructions below.
- (3 point) Generate a correct solution to the problem(s) in this lab. Three test inputs will be used.

Submission Files

- You must push only one .c file named: **lab2.c** (case sensitive)**.**
- Make sure to update your A number. Look at the top of lab2.c and write your A number including leading 0's.
- Github link is in learning hub.