

# Lab 11

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1. Create a 2D array of size 5x5 and fill it with random numbers.
2. Create a 2d array of size 3x3 and fill with integers from 0-8. Then copy the elements of this array to another 3x3 array that is rotated 90 degrees clockwise.

Here is the expected output:

```
Original array:
0  1  2
3  4  5
6  7  8
Rotated array:
6 3 0
7 4 1
8 5 2
```

3. Create a 2D array of size 5x5 and fill it will random integers. Then pass the array as a parameter to a method that finds the the maximum value and it's position(row, column) in the array. Finally, return the three values to the main method and print them out.
4. Create a 2D String array size 5x2. Then prompt the user to enter first and last names of 5 people. Store the first name in the first column and the last name in the second column. Finally, print out the full names of the people.

**Hint:** Use a for loop to prompt the user to enter the first and last names of 5 people. Use another for loop to print out the full names of the people.

Input:

```
Enter first name: John
Enter last name: Doe
Enter first name: Jane
Enter last name: Smith
Enter first name: Bob
Enter last name: Johnson
Enter first name: Alice
Enter last name: Brown
Enter first name: Mary
Enter last name: White
```

Output:

```
John Doe
Jane Smith
```

Bob Johnson  
Alice Brown  
Mary White

5. Finish the question from the last slide of the 2D lecture slides. How do you check if a player has won tic-tac-toe?