CS161 Final Proficiency Demonstrations (2-D array)

A magic square is one where the numbers in a 2-D array are arranged such that the sum of each column, each row, and each diagonal equal the same number. Example of a magic square (all columns, rows, and diagonals equal 15):

```
2 7 6
9 5 1
4 3 8
```

Write a program to **create a 3x3 two-dimensional** array on the **stack**:

- Fill the array with random numbers, 1 – 9 (inclusive), for each element in the array

- Write a function, **bool fun(int a[][3], int size)**, to:

- Determine if the array is a magic square.

- Return true if the array is magic, and false otherwise.

- Print the array, and whether it is a magic square, for the user.