Note: Implement Methods and add them all in your Utility class. Test the implementation in your Driver Class

Upload all files in your GitHub repository and send the link to edujzenitram@gmail.com on or before Midnight today.

Problems:

1. Take an array of length n where all the numbers are nonnegative and unique. Find the element in the array possessing the highest value. Split the element into two parts where first part contains the next highest value in the array and second part hold the required additive entity to get the highest value. Print the array where the highest value gets split into those two parts.

   Sample input: 4 8 6 3 2

   Sample output: 4 6 2 6 3 2

2. Write a program to shift every element of an array to circularly right. E.g.-
   Ask the user how many times (ROT) will it shift the contents of the array

   INPUT : 1 2 3 4 5

   ROT: 1

   OUTPUT : 5 1 2 3 4

3. Initialize a Multidimensional array of size 3x3.
   E.g.-

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

Check if the matrix is symmetric or not.

*Few important points to remember: A Square Matrix is said to be symmetric if it is equal to it's transpose. Transpose of a matrix is achieved by exchanging indices of rows and columns. Transpose is only defined for a square matrix.

4. Magic Square
   Lookup the article from the website below:

   https://mathworld.wolfram.com/MagicSquare.html

   Program Requirements

   a. A user must be able to input the size of the magic square.
   b. Use a method to create the magic square.
   c. Use a method to display the magic square.
   d. Implement additional methods as necessary

Feel free to lookup and adapt solutions online, however, make sure to include ample amount of comments in your code to help fully understand how the solution works.

Good luck!