**Safe Lock**

A safe Lock has been designed as follows:

Consists of discrete circular rotary locks. It can be opened only if the rotary locks are arranged in the correct order.

The lock is implemented as an even-order square matrix. Numbers can rotate around the semi-square, they can't move into other squares. And can't change their order.  
  
The safe lock will unlock if the sum () of all numbers in every row, column, primary diagonal, and secondary diagonal is the same.

A screenshot of a diagram

Description automatically generatedEx:

A yellow and black rectangle with numbers

Description automatically generatedeach semi-circle can be rotated (either clockwise or anticlockwise) as a rotatory lock. The safe unlocks when the matrix is,

**Input format:**   
 first line: The order of the matrix

Second line: An integer array () containing space-separated elements of the matrix.

**Output format:**

The sum ()

**Constraints:**

**Example input:**

8

0 0 1 1 1 1 0 0 0 0 1 1 1 1 0 0 1 1 0 0 0 0 1 1 1 1 0 0 0 0 1 1 0 0 1 1 1 1 0 0 0 0 1 1 1 1 0 0 1 1 0 0 0 0 1 1 1 1 0 0 0 0 1 1

**Example output:**

4

Details:

Sajitha Madugalle

Hacker rank: @akaMadda

0769867887