ALL pair XOR sum

2 3 4 5

A1 a2 a3 a4

Solution = a1+a1^ a1+a2 ^ a1+a3 ^ a1+a4

A2+a1 ^a2+a2 ^ a2+a3 ^ a2 +a4

…….

A4+a1 ^…………………………….a4+a4

4 5 6 7

5 6 7 8

6 7 8 9

7 8 9 10 to find in linear time. Find the sum of diagonals

So no need to form a matrix. Double the element and find the xor of continuous elements

https://www.geeksforgeeks.org/sum-xor-pairs-array/