* use the reverse or method or list slicing for it simplicity and efficiency.

Array - 2

* linear runtime complexity → O(N)

$0 \wedge N \rightarrow N$

XOR!

a	b	out
0	0	0
0	1	1
1	0	1
1	1	0

same ^ same = 0

diff ^ diff = 1

Practice xor differently.

2pointer (array sorting)

* Dutch National flag proble → 0, 1, 2
* sort 0 and one → 0 and 1 -

Print all pairs problem

Problem

① for i = 0 → n
  j = i → n

Code + Dry run

② for i = 0 → n
  j = 0, j < i ++

③ i = 0 i < n
  j = 0 => j <= i ++

④ i = 0 i < n
  j = 2n-1 ; j > 0 j = -

⑤ i = 0 → n
  j = n-1 ; j > i j = -i

two sum:

- in the array is there any pair can be made which sum is target.

three sum:

- print all triplets.

- Shift Array.

Replace in array.

- Shift_value = Array Size then there won't be any change.
- if Shift_value = Array size+1

  then Sift_Valo = 1

  Sift > size → Shift = Shift % size.