

## -° Lacture - 10 °-

### -° Array Problem °-

0-1 swap alternate

odd  $\left\{ \begin{array}{l} \text{i/p} \rightarrow \text{arr}[5] = \{ 1, 2, 7, 8, 5 \} \\ \text{o/p} \rightarrow \text{arr}[5] = \{ 2, 1, 8, 7, 5 \} \end{array} \right.$

even  $\left\{ \begin{array}{l} \text{i/p} \rightarrow \text{arr}[6] = \{ 1, 3, 5, 9, 11, 12 \} \\ \text{o/p} \rightarrow \text{arr}[6] = \{ 3, 1, 9, 5, 12, 11 \} \end{array} \right.$

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5	2	9	4	7	6	1	0
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 $\begin{matrix} l=0 & & 1 & & 2 & & 3 & & 4 & & 5 & & 6 & & 7 \end{matrix}$

$1 < \text{size}$        $\text{size} \rightarrow \text{array length}$   
 $1 < 8$  ——— inside the array  
then swap.

increment by 2. in for loop.  
 $i = i + 2$

= swap without swap function -  
with third variable

swap(arr[i], arr[j])

temp = arr[i]

arr[i] = arr[j]

arr[j] = temp

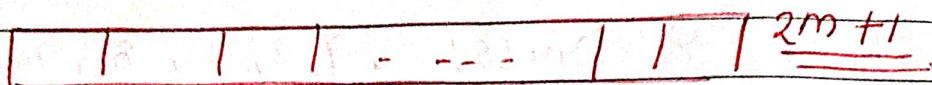


Given array of size 'n' and  $n = 2m + 1 \rightarrow \text{odd}$ .

You have been an integer array (1st LARR) of size  $N$  where  $N$  is equal to  $[2m+1]$ .

Now in given arraylist,  $m$  number are present twice and one number are present once

Solve:

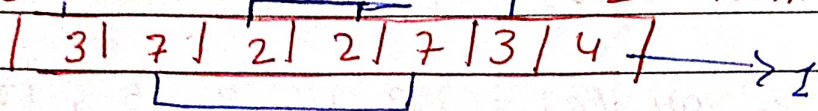


'm' number  $\rightarrow$  twice

$$m = 3$$

1

number  $\rightarrow$  appeal on



En:-

$$-45 + 10 - 10 + 10 +$$

for this fin 2.

Same Input  
Zero

XOR 0 -  $a \wedge a = 0$

2 3 1 6 3 6 2

$$2^{\wedge} 3^{\wedge} 1^{\wedge} 6^{\wedge} 3^{\wedge} 6^{\wedge} 2$$
$$= 0 \wedge 0 \wedge 0 \wedge 0 \wedge 1 = 1.$$

= Leet code :-

unique no. of occurrence:-

En. } 3 1 1 3 4 5 5 5 44

 $1 \rightarrow 27$  $3 \rightarrow 25$ 
$$2 \rightarrow 4$$

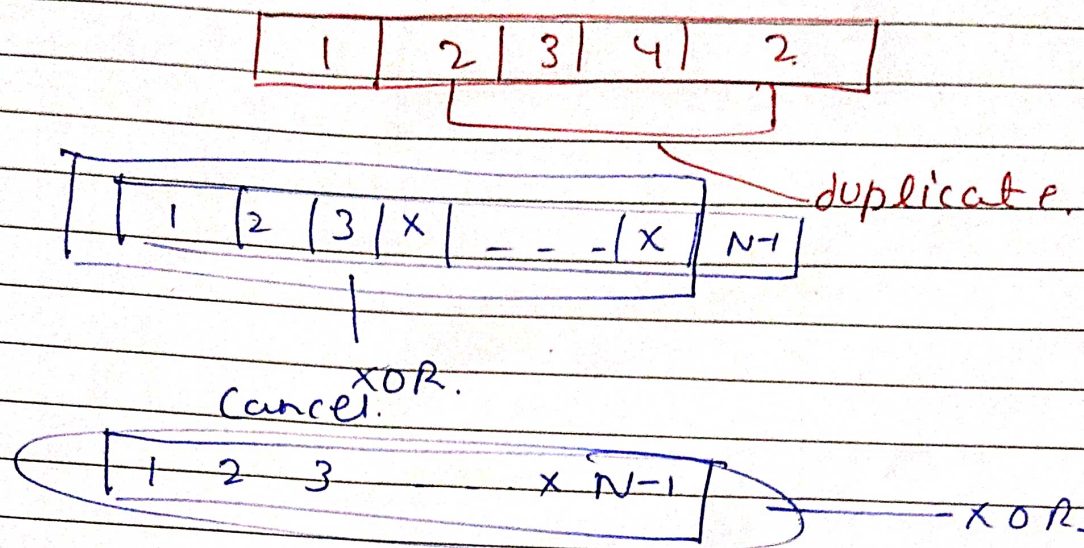
$\rightarrow 2$

~~Send not only up~~

~~set von Fehlern~~



Q. find duplicate of an array:  $N=5$ ,  $[1, N-1]$



Vector  $\rightarrow$  dynamic sort of array.

Q. intersection  $\rightarrow$  common element

$\rightarrow$  No. present  $\rightarrow$   $\{-1\}$  ans

$\rightarrow$  Sorted (non dec-order)

Ex  $\{1, 2, 5\}$

$\{3, 4\}$

$\{-1\}$