



# Cyclic Sort

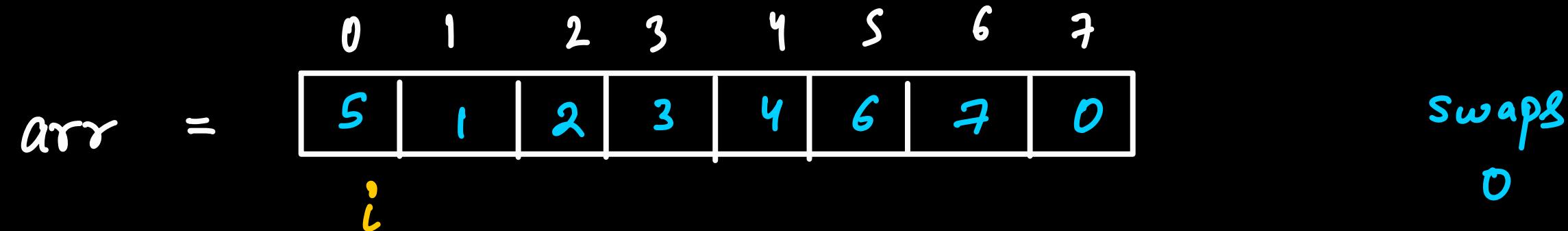


# Contents

1. Kahan lagaana hai ye Algo
2. Sawaal

1 to n, 0 to n-1, 0 to n

# Where to Apply?



```
int i=0;  
while(i<n){  
    if(arr[i]==i) i++;  
    else {  
        int idx = arr[i];  
        swap(arr[idx], arr[i]);  
    }  
}
```

arr = { 8 2 4 5 3 7 1 }

## Ques: Missing In Array

1 2 3 4 5 6 7  
0 1 2 3 4 5 6

arr = { 1 2 3 4 5 8 7 }

0 1 2 3 4 5 6  
1 2 3 4 5 6 7

i

Leetcode 268 → HW

# Ques: Array Duplicates

arr = { 1, 7, 3, 4, 8, 8, 7, 8, 3 }  
      i

ans = { 7, 8, 8 }

# HW: Find the duplicate Number

arr = { 0 1 2 3 4 5 6  
      { 4 2 4 4 1 6 3 }



# HW: Find all numbers disappeared in the array

Leetcode 448



# HW: Set Mismatch

Leetcode 645

# Ques: Smallest Positive Missing

0 1 2 3 4 5 6  
arr = { 1 -4 3 9 0 3 7 }  
*i*

0 1 2 3 4  
arr = { 1 2 3 4 5 }  
*i*





THANKYOU  
*Cuties*