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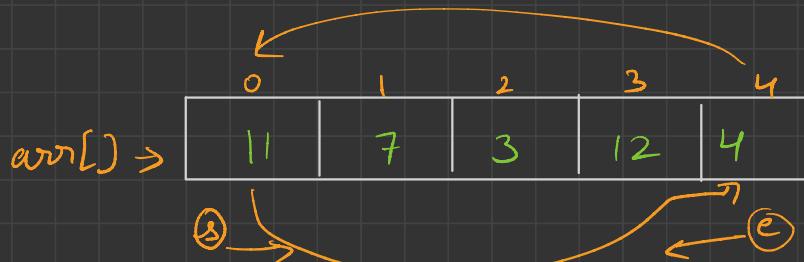
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$\text{arr}[] \rightarrow \{ 1, 3, 2, 4 \}$

Reverse

$\{ 4, 2, 3, 1 \}$



$\rightarrow 4, 7, 3, 12, 11$

(s) (e)

$\rightarrow 4, 12, 3, 7, 11$

(s) (e)

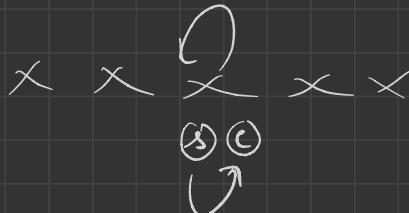
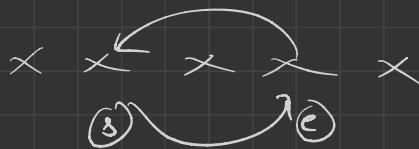
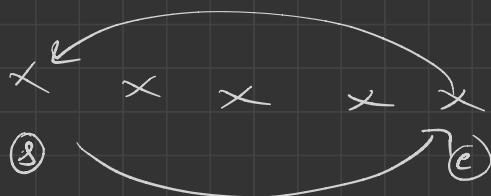
$s = e$

4, 12, 3, 7, 11

Original array →

11 7 3 12 4

4 12 3 7 11



✓ x x x x

c s

$s > c$   
break  
j++

$\rightarrow \text{arr1}[] = \{ \underline{\underline{i}}, \underline{\underline{3}}, \underline{\underline{5}}, \underline{\underline{7}}, \underline{\underline{9}} \}$   
 $\text{arr2}[] = \{ \underline{\underline{2}}, \underline{\underline{4}}, \underline{\underline{6}} \}$

$i - \downarrow j$   
 $\rightarrow \frac{\text{arr1}[i]}{\text{arr2}[j]}$   
 $\downarrow$   
 $\swarrow$   
 $\searrow$   
 $\text{arr3}[] / \text{index increment}$

1	2	3	4	5	6	7	8
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$\{ \frac{1}{ix}, \frac{3}{ix}, \frac{5}{ix}, \frac{7}{ix}, \frac{9}{ix} \}$   
 $\{ 2, 4, 6, 8, 10 \} \rightarrow$   
 j → array set → sort arr

$$1 \Big| 2 \Big| 3 \Big| 4 \Big| 5 \Big| 6 \Big)$$

while (i < n and j = m)  
     $\downarrow$   
     $\uparrow$

while ( $i < n$ )  
  copy  
   $\downarrow$

while ( $j < m$ )  
    copy  
         $j$

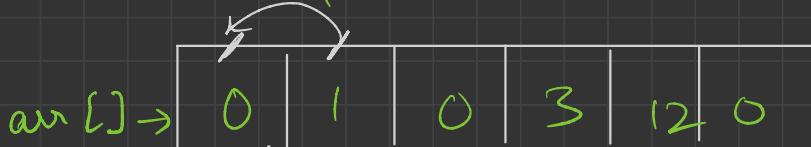
Move zeros

$$\{ 0, 1, 0, 3, 12 \}$$

$$0/p \rightarrow \{ 1, 3, 12, 0, 0 \}$$

$$i/p \rightarrow \{ 2, 0, 1, 3, 0, 0, 0 \}$$

$$0/p \rightarrow \{ 2, 1, 3, 0, 0, 0, 0 \}$$



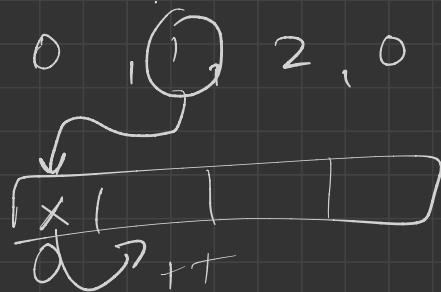
i  
++  
= zero  
= 0

$= 0 \rightarrow \text{ignore}$   
 $\neq 0 \rightarrow \text{swap}, i++$

1 0 0 3 12 0  
i

1 3 0 0 12 0

1 3 12 0 0 0  
i  
 $i \rightarrow n$   
swap done



# Rotate Array

(1, 3, 9, 12, 17)

K=2

12 17 1 3 9

1 3 7 9 11

K=4

3 7 9 11 1

2 3 7

12 15 9

K=3

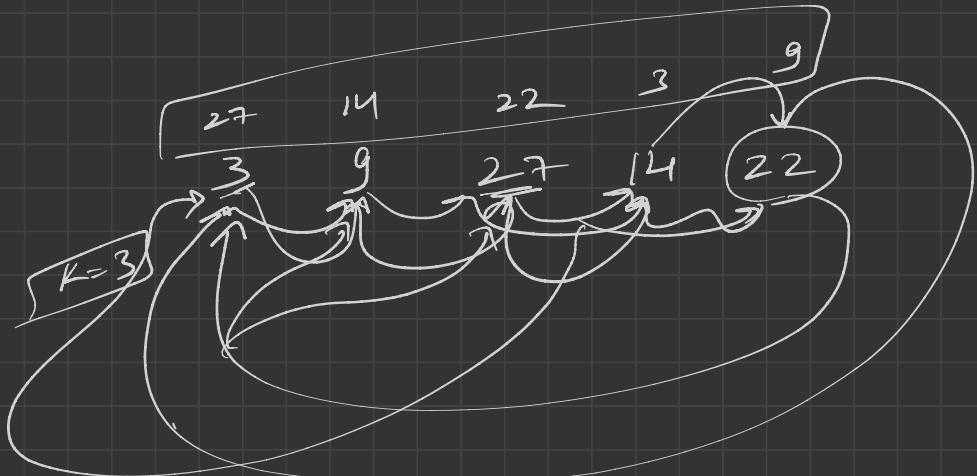
12 15 9 2 3 7

$1, 2, 3, 4, 5, 6, 7$        $K=3$

$5, 6, 7, 1, 2, 3, 4$

$-1, -100, 3, 99$        $K=2$

$3, 99, -1, -100$



0      1      2      3      4      5

0 1 2 3 4 5 0 1 2 3 5

$$n = \left\lceil \frac{1234}{10} \right\rceil \rightarrow \left\lceil \frac{0 - 9}{ans} \right\rceil$$

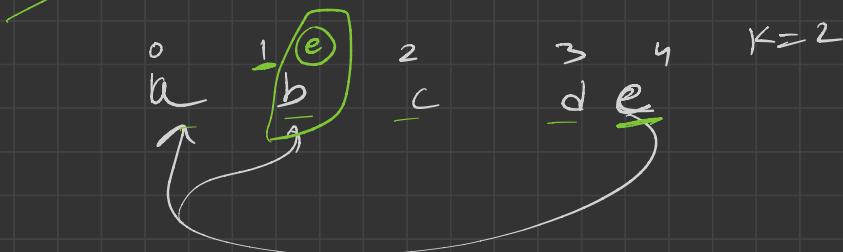
$$\% n \rightarrow \left\lceil 0 - (n-1) \right\rceil$$

$i \rightarrow$  current index

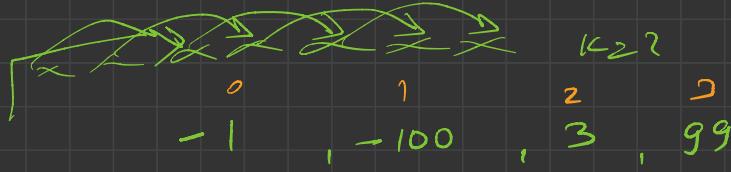
$k \rightarrow$  shift  $n \rightarrow$  size of array

$$(i+k) \% n$$

$$arr[(i+k)\%n] = arr[i]$$



$$(4+2)\%5$$
  
$$6 \% 5 = 1$$



$K=2$

$K=2$

$i=0$

$$\text{arr}[(i+K) \cdot \cdot n] = \text{arr}[i]$$

shifting of  
start ( $n-K$ )  
value by  $K$   
place

$$\text{arr}[2] = \text{arr}[i]$$

$\begin{array}{cccc} 0 & 1 & 2 & 3 \\ -1 & -100 & -1 & 99 \end{array}$

$i=1$

$$\text{arr}[(1+2) \cdot \cdot 4] = \text{arr}[i] = -100$$

$$\text{arr}[3] = -100$$

$\begin{array}{cccc} 0 & 1 & 2 & 3 \\ -1 & -100 & -1 & -100 \end{array}$

Also  
↳ copy last  
 $K$   
values

$i=2$

$$\text{arr}[(2+2) \cdot \cdot 4] = \text{arr}[2]$$

$$\text{arr}[0] = -1$$

$\begin{array}{cccc} -1 & -100 & -1 & -100 \end{array}$

↳ Apply from  
↳ place copied  
values

$\underline{i=3}$

$$\text{arr}[(3+2) \cdot \cdot 4] = \text{arr}[3]$$

$$\text{arr}[1] = \text{arr}[3]$$

$\begin{array}{cccc} -1 & -100 & -1 & -100 \end{array}$