In this Video, we are going to solve questions on Array:
- Rotate arrays
- Check if rotated and sorted array
- Add arrays

There is a lot to learn, Keep in mind " Mnn boot karega k chor yrr apne se nahi yoga ya maza nahi para, Just ask 1 question " Why I started ? "

Visit Relevel: https://relvl.co/2smk

Discord Server Link: https://discord.gg/feSQvVXMrd

Course Flow: https://whimsical.com/dsa-4-placement...

Homework: Added in Video already

Notes Link: https://drive.google.com/file/d/11ACm...

Code Links: https://github.com/loveBabbar/CodeHel...

Question Links:
- Rotate arrays: https://leetcode.com/problems/rotate-...
- Check if rotated and sorted array: https://leetcode.com/problems/check-i...
- Add arrays: https://bit.ly/3DXfsDZ

Do provide you feedback in the comments, we are going to make it best collectively.

$\oint -1 \rightarrow$ Rotate Array

$I/p \rightarrow arr[] = \{ 1, 7, 9, 11 \}$
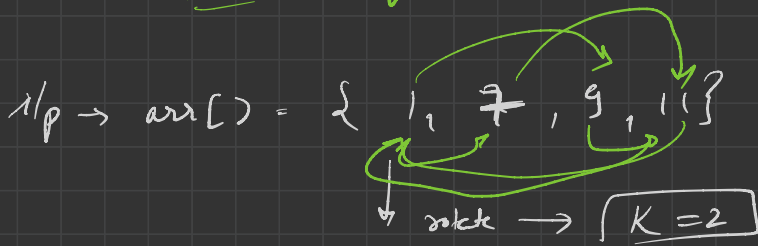
$\downarrow$ rotate $\rightarrow$ $\boxed{K = 2}$

$o/p \rightarrow$ $\boxed{\{ 9, 11, 1, 7 \}}$

$i/p \rightarrow [-1, -100, 3, 99]$

$K = 2$

rotated array

$o/p \rightarrow$ $\boxed{\{ \underline{3}, \underline{99}, -\underline{1}, -\underline{100} \}}$

$0 \qquad (n-1) \qquad n^{th}$

$\boxed{n^{th} \%n = 0}$

$\% \rightarrow \boxed{\%n} \rightarrow any/op \rightarrow [0 - (n-1)]$

$\%10 \rightarrow [0 - 9]$

$43 \% 10 = \boxed{3}$ $55 \% \neq 0 = \boxed{5}$

$59 \cdot / \cdot 10 = 9$

$70 \div 10 = 0$

$$\{ \quad \overset{0}{11}, \quad \overset{1}{12} \quad , \overset{2}{13}, \quad \overset{3}{14}, \overset{4}{15} \}$$

K=3

$$n \cdot 1 \quad \overset{\wedge}{} n+1 \quad \boxed{n+2}$$

$$(n+2) \cdot \text{/on} = \boxed{2}$$

$$\text{arr} \left[(i+K) \cdot \text{/on} \right] = \text{arr} [i]$$

↓

cyclic way me K position
se shift Kardya (d^{th} term ko)

nums = $\{ \dot{1}1, \dot{1}2, \overset{2}{\underline{13}}, \overset{7}{\underline{14}} \}$ $k=2$

$i=0$

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

⤷ num $[2] =$ nums $[0]$

| 11 | 12 | 11 | 14 |

$i=1$

nums $[3] =$ nums $[1]$

$\overset{0}{11}$ $\overset{1}{12}$ $\overset{2}{11}$ $\overset{3}{12}$

$i=2$

nums $[0] =$ nums $[2]$

11   12   11   12   temp

| | | | |

$i=3$

num $[1] =$ nums $[3]$

| 11 | 12 | 11 | 12 | ✗

↓

Overwrite

nums = $\left\{ \overset{0}{1}, \overset{1}{\underline{2}}, \overset{2}{\textcircled{3}}, \overset{3}{\cancel{\textcircled{4}}} \right\}$

i = 0

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

temp $[2]$ = 1

0	1	2	3
		1	

i = 1

temp $[3]$ = nums $[1]$

0	1	2	3
		1	2

i = 2

temp $[0]$ = nums $[2]$

0	1	2	3
3		1	2

i = 3

temp $[1]$ = nums $[3]$

0	1	2	3
3	4	1	2

rotated by
2 pbcy

Q - 2

$arr[] \rightarrow \{3, 4, 5, 1, 2\}$

$I^{st} \rightarrow \{1, 2, 3, 4, 5\}$ 1 pair →
$\boxed{nums[i-1] > nums[i]}$

$II^{nd} \rightarrow \{3, 4, 5, 1, 2\}$ 1 pair

$III^{rd} \rightarrow \{3, 5, 7, 1, 6\}$ 2 pair

true $\rightarrow$ 2 pair [above cond.]

3   5   7   1   6

$IV^{th} = \{1, 1, 1\}$ $i, j =$
pair a or 0

2

cout = 0 // 1 $\rightarrow$ true
else $\rightarrow$ false

arr 1 = | 1 | 2 | 3 | 4 |

arr 2 = | 6 |

```
        1
1  2   3 4
         6
  _____
 ( 1 2 4 0 )
```

```
      1
| 1 | 2 | 3 |

  | a   9 |

| 2 | 2 | 2 |
```

Ist case

```
→   1   2   3  4
                6
```

IIIrd

```
→   4  9  9
    9  9  9
```

carry
swar

IInd case

```
           1  6
→      1 2 3 4
          2 4 0
```

| 0 | 4 | 2 | | 1 | 1 |

↓
ulte

i

1	1

| 2 | 3 | j

carry $= 0$

sum $= 1 + 3 = 4$

carry $=$ sum $/ 10$

sum $=$ sum % 10

arr[i] = sum =

(1)

19

9

(8)

$\dfrac{18}{10} = 1$

$18 \% 10 = 8$