

rotate array by k times

→ [1, 2, 3, 4, 5]

$k=1 = [5, 1, 2, 3, 4]$
 $k2 = [4, 5, 1, 2, 3]$
 $k3 = [3, 4, 5, 1, 2]$
 $k4 = [2, 3, 4, 5, 1]$
 $k5 = [1, 2, 3, 4, 5]$
 $k6 = [5, 1, 2, 3, 4]$
 $k7 = [4, 5, 1, 2, 3]$

$k=1$
 $k=2$
 $\{ \text{for}(j=0; j < k; j++) \}$

key = $\text{arr}[n-1]$

$\text{int } i;$
 $\{ \text{for}(i=n-1; i > 0; i--) \}$
 $\text{arr}[i] = \text{arr}[i-1]$
 $\}$
 $\text{arr}[i] = \text{key}$

}

$k=7$

$n=5$

$k=5$
 $n=5$

$0 = k \% n$

$k = \underline{2} = k \% n$

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

$k=2$

$n-k$

$[1, 2, 3, 4, 5]$

l, i

$[1, 2, 3, 4, 5]$
 $\rightarrow [5, 4, 3, 2, 1]$

$i < j$

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i = 0
j = n-1
while(i < j) {
    temp = arr[i]
    arr[i] = arr[j]
    arr[j] = temp
    i++
    j--
}

```

$\rightarrow [1, 2, 3, 4, 5]$

$[5, 4, 3, 2, 1]$
 $[4, 5, 1, 2, 3]$

$k = 2$ $k = k \% n$

Reverse(arr, 0, n-1)
 \rightarrow Reverse(arr, 0, k-1)
 \rightarrow Reverse(arr, k, n-1)