

Example 1:

Input: nums = [1,2,3,4,5,6,7], k = 3

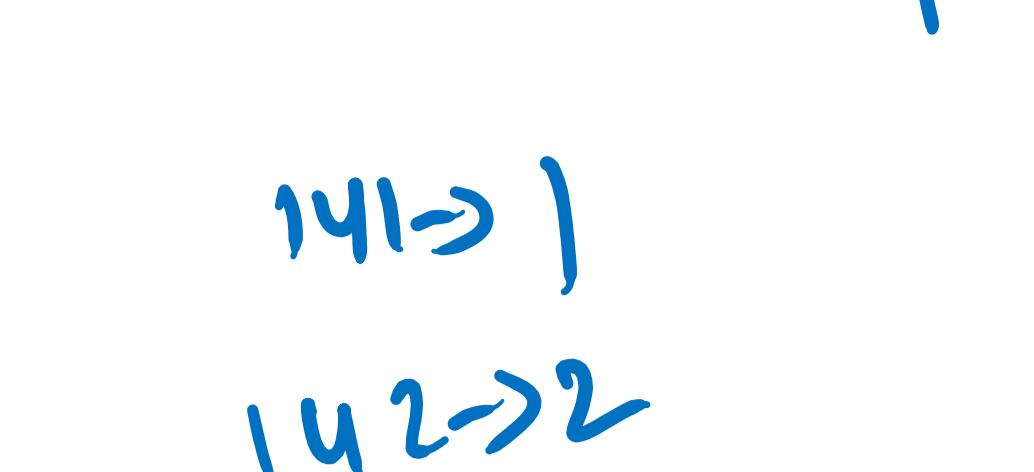
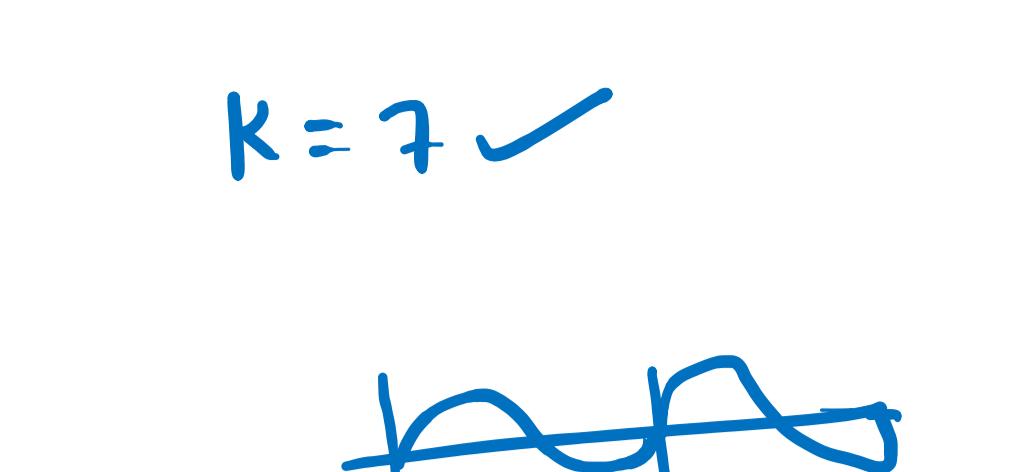
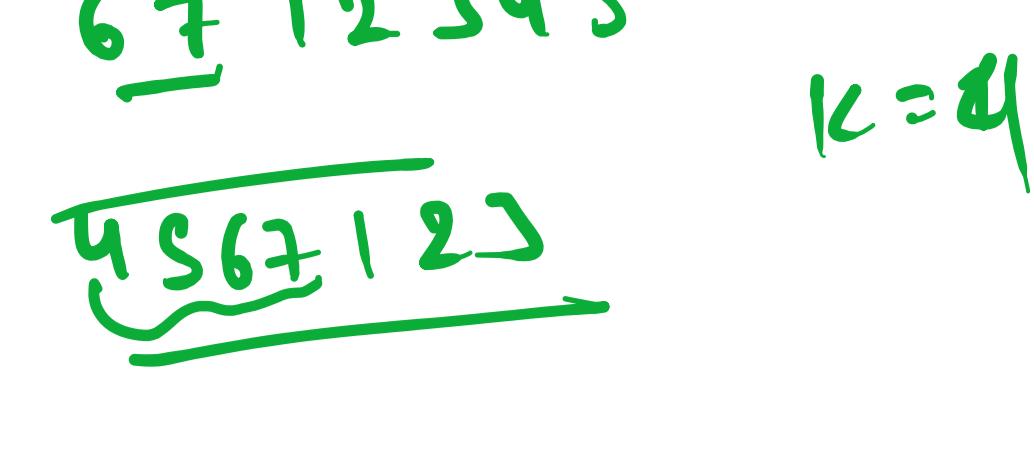
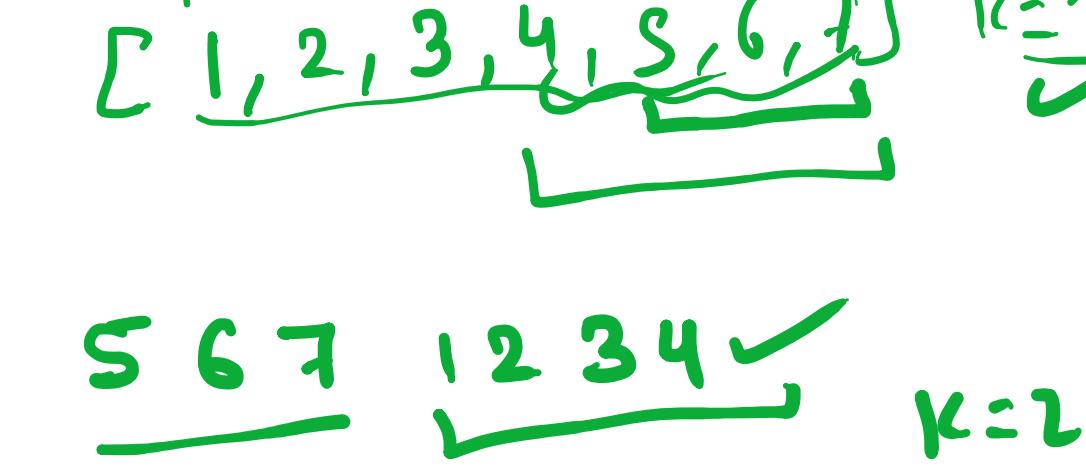
Output: [5,6,7,1,2,3,4]

Explanation:

rotate 1 steps to the right: [7,1,2,3,4,5,6]

rotate 2 steps to the right: [6,7,1,2,3,4,5]

rotate 3 steps to the right: [5,6,7,1,2,3,4]



K=143

K=K%N

K=1

K=2

K=3

K=4

K=5

K=6

K=7

K=8

K=9

K=10

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

K=7 ✓

K=6

K=5

K=4

K=3

K=2

K=1

K=0

K=143

K=143%7

0	1	2	3	4	5	6
10	20	30	40	50	60	70
20	30	40	50	60	70	10
30	40	50	60	70	10	20
40	50	60	70	10	20	30
50	60	70	10	20	30	40
60	70	10	20	30	40	50
70	10	20	30	40	50	60

for (i=n-2; i>=0; i--)
arr[i+1]=arr[i];

arr[i+1]=arr[i]

3

① $i = 5 \leftarrow arr[6] = arr[3]$
 ② $i = 4 \leftarrow arr[5] = arr[4]$
 ③ $i = 3 \leftarrow arr[4] = arr[3]$
 ④ $i = 2 \leftarrow arr[3] = arr[2]$
 ⑤ $i = 1 \leftarrow arr[2] = arr[1]$
 ⑥ $i = 0 \leftarrow arr[1] = arr[0]$

⑦ $arr[0] = i + n \rightarrow arr[0] = 143$

```
public static void Rotate(int[] arr, int k) {
    int n = arr.length;
    k = k % n;
    for (int j = 1; j <= k; j++) {
        int item = arr[n - 1];
        for (int i = n - 2; i >= 0; i--) {
            arr[i + 1] = arr[i];
        }
        arr[0] = item;
    }
}
```

K=2
 n=7
 6 7 1 1 2 3 4 5

i=5 → i=4
 arr(6)=arr(3)
 arr(5)=arr(4)
 arr(4)=arr(3)
 arr(3)=arr(2)
 arr(2)=arr(1)
 arr(1)=arr(0)

1 2 3

10 20 30 40 50 60 70

K=2

70 60 50 10 20 30 40

50 60 70

70 60 50 40 30 20 10

70 60 50 20 30 40 10

10 20 30 40 50 60 70

10 20 30 40 50 60 70

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