30 Days Leetcode Challenge - Day 5

import java.util.Arrays;

public class leetday5

{

public static void main(String[] args) {

// int arr [] = {1,2,3,4,5,6,7};

// int d = 3;

// rotateByD(arr,d);

// rotateRightbydopt(arr,d);

int arr [] = { 0,1,0,3,12};

moveZerosopt(arr);

}

public static void rotateByD(int arr [] , int d )

{

int n= arr.length;

for(int i=0;i<d;i++)

{

int temp = arr[n-1];

for(int j=n-1;j>0;j--)

{

arr[j] = arr[j-1];

}

arr[0] = temp;

}

System.out.println(Arrays.toString(arr));

}

public static void rotateRightbydopt(int arr [], int d )

{

int n = arr.length;

d = d%n;

reverse(arr,0,n-1);

reverse(arr,0,d-1);

reverse(arr,d,n-1);

System.out.println(Arrays.toString(arr));

}

public static void reverse (int arr [] , int start , int end)

{

while(start<=end)

{

int temp = arr[start];

arr[start] = arr[end];

arr[end] = temp;

start++;

end--;

}

}

public static void moveZeros(int arr [])

{

int n = arr.length;

int j = -1;

for(int i=0;i<n;i++)

{

if(arr[i]==0)

{

j=i;

break;

}

}

for(int i=j+1;i<n;i++)

{

if(arr[i]!=0)

{

int temp = arr[i];

arr[i] = arr[j];

arr[j] = temp;

j++;

}

}

System.out.println(Arrays.toString(arr));

}

public static void moveZerosopt(int arr [])

{

int n = arr.length;

int j =0;

for(int i=0;i<n;i++)

{

if(arr[i]!=0)

{

int temp = arr[i];

arr[i] = arr[j];

arr[j] = temp;

j++;

}

}

System.out.println(Arrays.toString(arr));

}

}