### Moore voting algorithm

find the majority element with more than n/2 occurrences

http://www.geeksforgeeks.org/majority-element/

Find element with more than n/3 occurrences

https://leetcode.com/problems/majority-element-ii/

Can be generalised to n/k - take a hash map of k-1 size

#### **Rotated sorted array**

http://www.geeksforgeeks.org/search-an-element-in-a-sorted-and-pivoted-array/

With duplicates

https://leetcode.com/problems/search-in-rotated-sorted-array-ii/

solution

https://discuss.leetcode.com/topic/8087/c-concise-log-n-solution/13

https://leetcode.com/problems/find-minimum-in-rotated-sorted-array/

# Median of two sorted arrays

http://www.geeksforgeeks.org/median-of-two-sorted-arrays/

### Rotate an array

Juggling algorithm

http://www.geeksforgeeks.org/array-rotation/

Reversal

http://www.geeksforgeeks.org/program-for-array-rotation-continued-reversal-algorithm/

**Block swapping** 

http://www.geeksforgeeks.org/block-swap-algorithm-for-array-rotation/

**Dutch National flag problem** 

http://www.geeksforgeeks.org/sort-an-array-of-0s-1s-and-2s/

First smallest missing number

http://www.geeksforgeeks.org/find-the-first-missing-number/

With negative numbers included

http://www.geeksforgeeks.org/find-the-smallest-positive-number-missing-from-an-unsorted-array

Maximize j-i such that a[i]<a[j]

http://www.geeksforgeeks.org/given-an-array-arr-find-the-maximum-j-i-such-that-arrj-arri/

Max of all subarrays of size k
<a href="http://www.geeksforgeeks.org/maximum-of-all-subarrays-of-size-k/">http://www.geeksforgeeks.org/maximum-of-all-subarrays-of-size-k/</a>
Extend it to 2d array!

For questions to find duplicate/missing elements with range from 1 to n

- Sorting
- Formula
- Xor
- Use elements as index

Subarray with given sum

http://www.geeksforgeeks.org/find-subarray-with-given-sum/

The celebrity problem

http://www.geeksforgeeks.org/the-celebrity-problem/

Min number of jumps to reach the end- greedy

## To do

http://www.geeksforgeeks.org/g-fact-84/

http://www.geeksforgeeks.org/counting-inversions/

http://www.geeksforgeeks.org/median-of-two-sorted-arrays/

http://www.geeksforgeeks.org/median-of-stream-of-integers-running-integers/

https://leetcode.com/problems/search-in-rotated-sorted-array-ii/

http://www.geeksforgeeks.org/median-of-two-sorted-arrays/

http://www.geeksforgeeks.org/count-smaller-elements-on-right-side/