Arrays

1. Given an input number in array form. Push all the zeroes to the end maintaining the order of rest of elements.
2. A sorted array has been rotated by some number k in clockwise direction. Find k.
   e.g. Input: 5,6,1,2,3,4 Output: 2
3. You are given with an array containing only 0's and 1's. Write a function to sort this array. Find a solution which scans the array only once.
4. What if the array has 0's, 1's and 2's. Find another solution which scans the array once.
5. Find the duplicate number in an array of size n with numbers from 0 to n-2. Each number is present at least once.