EXERCISES

Given an array of n elements, how do you print the frequencies of elements without using extra space. Assume all elements are positive, editable and less than n.
The equilibrium index of an array is an index such that the sum of elements at lower indexes is equal to the sum of elements at higher indexes.
Given an array of n positive numbers. All numbers occur an even number of times except 1 which occurs an odd number of times. Find that number in O(n) time and O(1) space.
Find the Rotation Count in Rotated Sorted array Consider an array of distinct numbers sorted in increasing order. The array has been rotated (clockwise) k number of times. Given such an array, find the value of k.

Equilibrium index

```
int arr2[] = {50, 10, 65, 5, 15, 20,
30, 25, 35};
```

Left of index 3 (left of number 5)
50 + 10 + 65 =125

Right of index 3 (right of number 5)
15 + 20 + 30 + 25 + 35 = 125

Equilibrium index = 3

No equilibrium index for this array - { 10 20 30 }