**717821E113**

**Array prefix sum**

**724** Q1. Find Pivot Index Given an array of integers nums, calculate the pivot index of this array.

class Solution {

    public int pivotIndex(int[] nums) {

        int[] l=new int[nums.length];

        int[] r=new int[nums.length];

        l[0]=0;

        r[nums.length-1]=0;

        for(int i=1,j=0;i<nums.length;i++){

            l[i]=l[i-1]+nums[j++];

        }

        for(int i=nums.length-2,j=nums.length-1;i>=0;i--){

            r[i]=r[i+1]+nums[j--];

        }

        for(int i=0;i<nums.length;i++){

            if(l[i]==r[i]){

                return i;

            }

        }

        return -1;

    }

}

**1413** Q2. Minimum Value to Get Positive Step by Step Sum Given an array of integers nums, you start with an initial positive value startValue. In each iteration, you calculate the step by step sum of startValue plus elements in nums (from left to right). Return the minimum positive value of startValue such that the step by step sum is never less than 1.

class Solution {

    public int minStartValue(int[] nums) {

        int start = 1;

        int current = start;

        for (int i = 0; i < nums.length; i++) {

            current += nums[i];

            if (current < 1) {

                start += 1 - current;

                current = 1;

            }

        }

        return start;

    }

}