1. Given an array of **N** integers, and an integer **K**, find the number of pairs of elements in the array whose sum is equal to **K**.

N = 4, K = 6

arr[] = {1, 5, 7, 1}

**Output:** 2

**Explanation:**

arr[0] + arr[1] = 1 + 5 = 6

and arr[1] + arr[3] = 5 + 1 = 6.

2. Given an array a[] of size N which contains elements from 0 to N-1, you need to find all the elements occurring more than once in the given array.

**Input:**

N = 5

a[] = {2,3,1,2,3}

**Output:** 2 3

**Explanation:** 2 and 3 occur more than once in the given array.

3. Given an array, rotate the array by one position in clock-wise direction.

**Input:**

N = 5

A[] = {1, 2, 3, 4, 5}

**Output:**5 1 2 3 4

4. Given an unsorted array **Arr** of **N** positive and negative numbers. Your task is to create an array of alternate positive and negative numbers without changing the relative order of positive and negative numbers.

**Note:** Array should start with positive number. **Input:**

N = 9

Arr[] = {9, 4, -2, -1, 5, 0, -5, -3, 2}

**Output:**

9 -2 4 -1 5 -5 0 -3 2

5 . An element is called a peak element if its value is not smaller than the value of its adjacent elements(if they exists).

Given an array **arr[]** of size **N**, find the index of any one of its peak elements.

**Input:**

N = 3

arr[] = {1,2,3,0,9,4}

Output: 2

Explanation: index 2 is 3.

It is the peak element as it is

greater than its neighbour 2.

**Input:**

N = 2

arr[] = {3,4}

**Output:** 1

**Explanation:** 4 (at index 1) is the

peak element as it is greater than

its only neighbour element 3.

6.Given a integer find the sum of its odd and even digits.

2345 = odd -> 8

Even - > 6