Problem-1: Separate 0s and 1s in an array

arr[] = {0,1,0,0,1,1,1,0,1}

Array after separating odd and even numbers :

{0,0,0,0,1,1,1,1,1}

Problem-2: Separate odd and even numbers in an array

arr[] = {12, 17, 70, 15, 22, 65, 21, 90}

Array after separating odd and even numbers :

{12, 90, 70, 22, 15, 65, 21, 17}

Problem-3: Sort an array of 0s, 1s and 2s

Input :

[1, 2, 2, 0, 0, 1, 2, 2, 1]

Output :

[0, 0, 1, 1, 1, 2, 2, 2, 2]

Time complexity: O(n)

Problem-4: Find a Pair Whose Sum is Closest to zero in Array

array[]={1,3,-5,7,8,20,-40,6};

The pair whose sum is closest to zero : -5 and 6