Prefix Sum Array – Implementation and Applications in Competitive Programming

Given an array arr[] of size n, its prefix sum array is another array prefixSum[] of same size such that the value of prefixSum[i] is arr[0] + arr[1] + arr[2] … arr[i].

**Examples :**

Input : arr[] = {10, 20, 10, 5, 15}

Output : prefixSum[] = {10, 30, 40, 45, 60}

Explanation : While traversing the array, update

the element by adding it with its previous element.

prefixSum[0] = 10,

prefixSum[1] = prefixSum[0] + arr[1] = 30,

prefixSum[2] = prefixSum[1] + arr[2] = 40 and so on.