Count triplets with sum smaller than X

Friday, December 24, 2021 5:31 PM

Count triplets with sum smaller than X

Medium Accuracy: 49.96% Submissions: 25677 Points: 4

Given an array **arr[]** of distinct integers of size **N** and a value **sum**, the task is to find the count of triplets **(i, j, k)**, having **(i<j<k)** with the sum of **(arr[i] + arr[j] + arr[k])** smaller than the given value sum.

Example 1:

Input: N = 4, sum = 2
arr[] = {-2, 0, 1, 3}
Output: 2
Explanation: Below are triplets with
sum less than 2 (-2, 0, 1) and (-2, 0, 3).

Example 2:

Input: N = 5, sum = 12
arr[] = {5, 1, 3, 4, 7}
Output: 4
Explanation: Below are triplets with
sum less than 12 (1, 3, 4), (1, 3, 5),
(1, 3, 7) and (1, 4, 5).

Your Task:

This is a function problem. You don't need to take any input, as it is already accomplished by the driver code. You just need to complete the function countTriplets() that take array arr[], integer N and integer sum as parameters and returns the count of triplets.

From <https://practice.geeksforgeeks.org/problems/count-triplets-with-sum-smaller-than-x5549/1>

Expected Time Complexity: $O(N^2)$.
Expected Auxiliary Space: $O(1)$.

Constraints:
$3 \leq N \leq 10^3$
$-10^3 \leq arr[i] \leq 10^3$

View Bookmarked Problems

Company Tags

- Amazon
- SAP Labs

Topic Tags

- Arrays
- Two-pointer-algorithm

Related Interview Experiences

- Amazon interview experience set 367 campus internship
- Amazon interview experience set 383 campus internship