

Count Pairs whose sum is less than target

Difficulty: Easy

Accuracy: 53.13%

Submissions: 33K+

Points: 2

Given an array **arr[]** and an integer **target**. You have to find the number of pairs in the array whose sum is strictly less than the **target**.

Examples:

Input: arr[] = [7, 2, 5, 3], target = 8**Output:** 2**Explanation:** There are 2 pairs with sum less than 8: (2, 5) and (2, 3).**Input:** arr[] = [5, 2, 3, 2, 4, 1], target = 5**Output:** 4**Explanation:** There are 4 pairs whose sum is less than 5: (2, 2), (2, 1), (3, 1) and (2, 1).**Input:** arr[] = [2, 1, 8, 3, 4, 7, 6, 5], target = 7**Output:** 6**Explanation:** There are 6 pairs whose sum is less than 7: (2, 1), (2, 3), (2, 4), (1, 3), (1, 4) and (1, 5).

```
1 // } Driver Code Ends
2
3 // User function Template for Java
4
5 class Solution {
6
7     int countPairs(int arr[], int target) {
8         Arrays.sort(arr);
9         int left = 0, right = arr.length - 1;
10        int cnt = 0;
11        while(left < right){
12            int sum = arr[left] + arr[right];
13            if(sum < target){
14                cnt += right - left;
15                left++;
16            }
17            else{
18                right--;
19            }
20        }
21        return cnt;
22    }
23 }
24
25 // } Driver Code Ends
```

