

CICLO 2 – JAVASCRIPT

Calentamiento – Project Estimates

A number of bids are being taken for a project. Determine the number of distinct pairs of project costs where their absolute difference is some target value. Two pairs are distinct if they differ in at least one value.

Example

$n = 3$

$projectCosts = [1, 3, 5]$

$target = 2$

There are 2 pairs $[1, 3]$, $[3, 5]$ that have the target difference $target = 2$, therefore a value of 2 is returned.

Function Description

Complete the function *countPairs* in the editor below.

countPairs has the following parameter(s):

int projectCosts[n]: array of integers

int target: the target difference

Returns

int: the number of distinct pairs in *projectCosts* with an absolute difference of *target*

Constraints

- $5 \leq n \leq 10^5$
- $0 < projectCosts[i] \leq 2 \times 10^9$
- Each $projectCosts[i]$ is distinct, i.e. unique within *projectCosts*
- $1 \leq target \leq 10^9$

▼ Input Format for Custom Testing

Input from stdin will be processed as follows and passed to the function.

The first line contains an integer n , the size of the array *projectCosts*.

The next n lines each contain an element *projectCosts*[i] where $0 \leq i < n$.

The next line contains the integer *target*, the target difference.

▼ Sample Case 0

Sample Input 0

STDIN	Function
5	→ projectCosts[] size n = 5
1	→ projectCosts = [1, 5, 3, 4, 2]
5	
3	
4	
2	
2	→ target = 2

Sample Output 0

3

▼ Sample Case 1

Sample Input 1

STDIN	Function
10	→ projectCosts[] size n = 10
363374326	→ projectCosts = [363374326, 364147530, 61825163,
107306571, 128124602, 139946991, 428047635, 491595254, 879792181,	
106926279]	
364147530	
61825163	
107306571	
128124602	
139946991	
428047635	
491595254	
879792181	
106926279	
1	→ target = 1

Sample Output 1

0