4m 4s left

1. Pairs



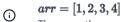
Given an array of integers and a target value, determine the number of pairs of array elements that have a difference equal to the target

ALL

Example

$$k = 1$$





There are three values that differ by k=1: 2-1=1, 3-2=1, and 4-3=1. Return 3.

Function Description

Complete the *pairs* function below. 1

pairs has the following parameter(s):

- int k: an integer, the target difference
- int arr[n]: an array of integers

Returns

• *int:* the number of pairs that satisfy the criterion

Input Format

The first line contains two space-separated integers n and k, the size of arr and the target value.

The second line contains n space-separated integers of the array arr.

Constraints

- $2 < n < 10^5$
- $0 < k < 10^9$
- $0 < arr[i] < 2^{31} 1$
- each integer arr[i] will be unique

Sample Input

```
STDIN
           Function
5 2
           arr[] size n = 5, k =2
1 5 3 4 2 arr = [1, 5, 3, 4, 2]
```

Sample Output

3

Explanation

There are 3 pairs of integers in the set with a difference of 2: [5,3], [4,2] and [3,1].

