

<https://course.acciojob.com/idle?question=6f4e8e7c-f7d4-4355-ba00-63aa4608c77d>

● EASY

● Max Score: 30 Points

Good triplets from array

You are given an integer array `arr` of size `n`. Additionally, you are also given three integers `a`, `b` and `c`.

Your task is to find the number of good triplets in the given array `arr`.

A triplet (`arr[i]`, `arr[j]`, `arr[k]`) is good if the following conditions are true:

$0 \leq i < j < k < \text{arr.length}$

$|\text{arr}[i] - \text{arr}[j]| \leq a$

$|\text{arr}[j] - \text{arr}[k]| \leq b$

$|\text{arr}[i] - \text{arr}[k]| \leq c$

You have to complete `getGoodTriplets` function which contains `arr` array of size `n` and integers `a`, `b`, `c` as inputs and return integer answer as output.

Input Format

First line contains an integer `n` denoting size of array

Second line contains `n` integers denoting the array elements separated by single space

Third line contains input of `a b c` respectively.

Output Format

Print the number of good triplets

Example 1

Input

```
6
3 0 1 1 9 7
7 2 3
```

Output

4

Explanation

There are 4 good triplets: [(3,0,1), (3,0,1), (3,1,1), (0,1,1)]

Example 2

Input

```
5
1 1 2 2 3
0 0 1
```

Output

0

Explanation

No triplet satisfies all conditions.

Constraints

$1 \leq n \leq 100$

$-100000 \leq \text{arr}[i] \leq 10000$

Topic Tags

- Conditionals
- Loops
- Basics
- Arrays

My code

// in java

```
import java.util.*;  
import java.lang.*;  
import java.io.*;
```

```
public class Main
```

```
{
```

```
    public static void main (String[] args) throws java.lang.Exception  
    {
```

```
        //your code here
```

```
        Scanner s=new Scanner(System.in);
```

```
        int n=s.nextInt();
```

```
        int arr[]=new int [n];
```

```
        for(int i=0;i<n;i++)
```

```
            arr[i]=s.nextInt();
```

```
            int a=s.nextInt();
```

```
            int b=s.nextInt();
```

```
            int c=s.nextInt();
```

```
            for(int i=0;i<n-2;i++)
```

```
                {
```

```
                    for(int j=i+1;j<n-1;j++)
```

```
                        {
```

```
                            int flag=0;
```

```

        for(int k=j+1;k<n;k++)
        {
            if(arr[i]-arr[j]<=a)
            {
                if(arr[j]-arr[k]<=b)
                {
                    if(arr[i]-arr[k]<=a)
                    {
                        flag=1;
                    }
                    else flag=0;
                }
                else flag=0;
            }
            else flag=0;
        }
        if(flag==1)
            c++;
    }
}
System.out.print(c);
}
}

```