

<https://course.acciojob.com/idle?question=69903307-ad1f-4d5b-9777-42f4ee79c8ba>

● EASY

● Max Score: 30 Points

## Accio Triangle

Harsh has an array  $ARR$  of length  $N$ . He wants to know if it is possible to form at least one Accio triangle using values of  $ARR$  as sides of the triangle. If this is possible, output "YES" otherwise output "NO".

A triangle is called Accio if all three points of the triangle do not lie on the same line.

### Input Format

The first line of input contains an integer  $N$  denoting the size of the array  $ARR$ .

The second line of input contains  $N$  space-separated integers denoting the elements of the array.

### Output Format

Return the string "YES" if it is possible to form at least one Accio triangle, else return the string "NO".

### Example 1

Input

```
5
4 2 1 3 2
```

Output

```
YES
```

Explanation

If we choose the sides as { 2,3,4} or {2,2,1} or {2,2,3} then it is possible to form a Accio triangle.

## Example 2

Input

```
3
1 10 100
```

Output

NO

Explanation

There is no possible combination here to make an Accio Triangle.

## Constraints

$3 \leq N \leq 10^5$

$1 \leq \text{ARR}[i] \leq 10^9$

Where  $\text{ARR}[i]$  denotes the  $i$ -th element in the array.

### Topic Tags

- Math
- Sorting

# 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();
        Arrays.sort(arr);
        for(int i=n-1;i>1;i--)
        {
            if(arr[i]<(arr[i-1]+arr[i-2]))
            {
                System.out.print("YES");
                return;
            }
        }

        System.out.print("NO");

    }
}

```