



Impressing the Boss

Problem

Submissions

Leaderboard

Discussions

Editorial

Given the consecutive years' sales data of a company as an array of integers: $a = [a_0, a_1, \dots, a_{n-1}]$, with a_i denoting the total sales during the i^{th} year, your current task is to present the annual sales graph.

Your boss would be most impressed if the sales graph showed that the total sales never decreased for every pair of consecutive years. For this, you are allowed to modify at most one element of the data array for the property to be true. (Any more and the change will be too obvious.)

Given a , determine if it is possible to do this task.

Complete the function `canModify` which takes in the integer array a and returns the string YES or NO denoting whether it is possible to do the task.

Input Format

The first line of input denotes t denoting the number of scenarios. The following lines describe the scenarios.

The first line of each scenario contains a single integer n denoting the length of array a . The second line contains n space-separated integers a_0, a_1, \dots, a_{n-1} .

Constraints

- $1 \leq t \leq 20$
- $1 \leq n \leq 20$
- $1 \leq a_i \leq 2000$

Output Format

For each scenario, print a single line containing a single string: either YES or NO denoting whether it is possible to do the task.

Sample Input 0

```
2
8
5 7 7 11 15 12 22 24
9
20 19 18 16 14 15 14 13 11
```

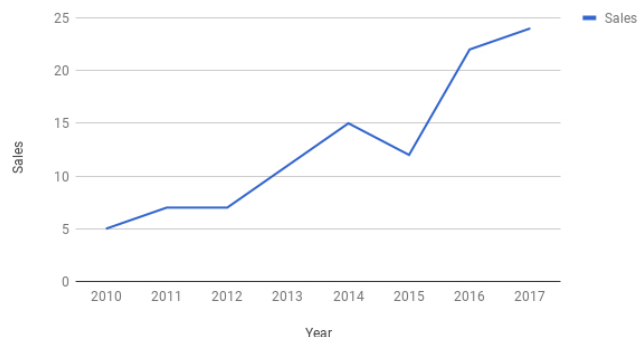
Sample Output 0

```
YES
NO
```

Explanation 0

In the first scenario, $a = [5, 7, 7, 11, 15, 12, 22, 24]$, and the annual sales graph looks as follows:

Sales vs. Year



The graph can be modified to meet the necessary condition by changing 12 to 20.

Sales vs. Year

Author	kevinsogo
Difficulty	Easy
Max Score	20
Submitted By	1651

NEED HELP?

- View discussions
- View editorial
- View top submissions

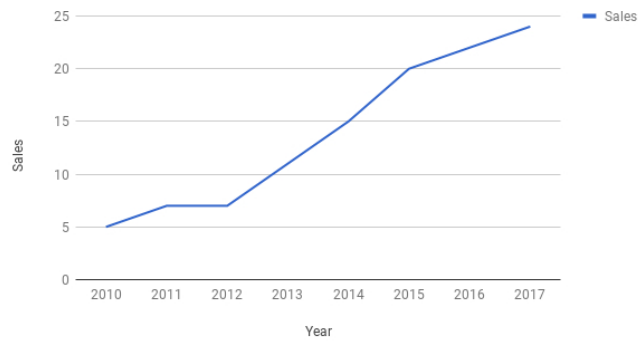
RATE THIS CHALLENGE



MORE DETAILS

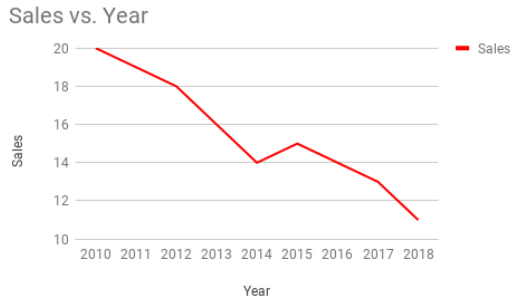
- Download problem statement
- Download all test cases
- Suggest Edits





Thus, the answer is YES.

In the second scenario, $a = [20, 19, 18, 16, 14, 15, 14, 13, 11]$, and the graph looks like:



Clearly, it's impossible to change one element so that the sales never decreases.

Change Theme

Java 7

```

1  import java.io.*;
2  import java.math.*;
3  import java.text.*;
4  import java.util.*;
5  import java.util.regex.*;
6
7  public class Solution {
8
9      /*
10       * Complete the canModify function below.
11       */
12     static String canModify(int[] a) {
13         /*
14          * Write your code here.
15          */
16     }
17
18
19     private static final Scanner scanner = new Scanner(System.in);
20

```

Line: 1 Col: 1

Upload Code as File

Test against custom input

Run Code

Submit Code