



HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS HACKS ROOM STANDINGS CUSTOM INVOCATION

## A. Submission Bait

time limit per test: 1 second memory limit per test: 256 megabytes

Alice and Bob are playing a game in an array a of size n.

They take turns to do operations, with Alice starting first. The player who can not operate will lose. At first, a variable mx is set to 0.

In one operation, a player can do:

• Choose an index i  $(1 \le i \le n)$  such that  $a_i \ge mx$  and set mx to  $a_i$ . Then, set  $a_i$  to 0.

Determine whether Alice has a winning strategy.

## Input

The first line contains an integer t ( $1 \le t \le 10^3$ ) — the number of test cases.

For each test case:

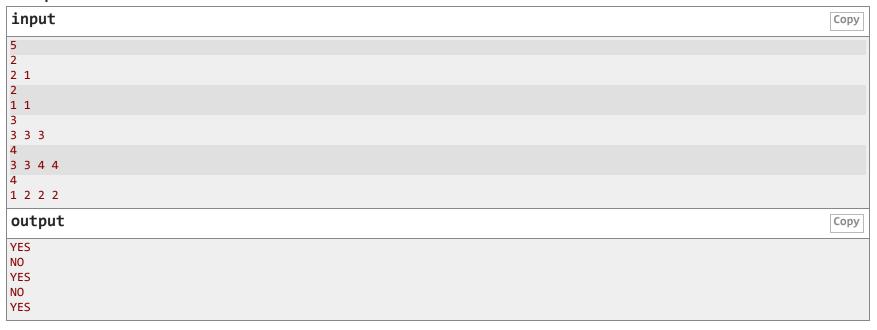
- The first line contains an integer n ( $2 \le n \le 50$ ) the size of the array.
- The second line contains n integers  $a_1, a_2, \ldots, a_n$   $(1 \le a_i \le n)$  the elements of the array.

#### **Output**

For each test case, if Alice has a winning strategy, output "YES". Otherwise, output "NO".

You can output the answer in any case (upper or lower). For example, the strings "yEs", "yes", "yes", and "YES" will be recognized as positive responses.

#### **Example**



# Note

In the first test case, Alice can choose i=1 since  $a_1=2\geq mx=0$  .

After Alice's operation, a=[0,1] and mx=2. Bob can not do any operation. Alice wins.

In the second test case, Alice doesn't have a winning strategy.

For example, if Alice chooses i=1, after Alice's operation: a=[0,1] and mx=1. Then, Bob can choose i=2 since  $a_2=1\geq mx=1$ . After Bob's operation: a=[0,0] and mx=1. Alice can not do any operation. Bob wins.

## Codeforces Round 960 (Div. 2)

# Finished

#### → Practice?

Want to solve the contest problems after the official contest ends? Just register for practice and you will be able to submit solutions.

Register for practice

### → Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest



 $\times$ 

## → Contest materials

- Announcement (en)
- Tutorial (en)
- Video Tutorial (en)

Codeforces (c) Copyright 2010-2024 Mike Mirzayanov The only programming contests Web 2.0 platform Server time: Aug/04/2024 05:42:09<sup>UTC</sup> (h2).

Desktop version, switch to mobile version.

Privacy Policy

Supported by



