

Andy wants to play a game with his little brother, Bob. The game starts with an array of distinct integers and the rules are as follows:

- Bob always plays first.
- In a single move, a player chooses the maximum element in the array. He removes it and all elements to its right. For example, if the starting array  $arr = [2, 3, 5, 4, 1]$ , then it becomes  $arr' = [2, 3]$  after removing  $[5, 4, 1]$ .
- The two players alternate turns.
- The last player who can make a move wins.

Andy and Bob play  $g$  games. Given the initial array for each game, find and print the name of the winner on a new line. If Andy wins, print `ANDY`; if Bob wins, print `BOB`.

To continue the example above, in the next move Andy will remove **3**. Bob will then remove **2** and win because there are no more integers to remove.

## Function Description

Complete the `gamingArray` function in the editor below.

`gamingArray` has the following parameter(s):

- `int arr[n]`: an array of integers

## Returns

- `string`: either `ANDY` or `BOB`

## Input Format

The first line contains a single integer  $g$ , the number of games.

Each of the next  $g$  pairs of lines is as follows:

- The first line contains a single integer,  $n$ , the number of elements in  $arr$ .
- The second line contains  $n$  distinct space-separated integers  $arr[i]$  where  $0 \leq i < n$ .

## Constraints

- Array  $arr$  contains  $n$  distinct integers.

For **35%** of the maximum score:

- $1 \leq g \leq 10$
- $1 \leq n \leq 1000$
- $1 \leq arr[i] \leq 10^5$

- The sum of  $n$  over all games does not exceed **1000**.

For **100%** of the maximum score:

- $1 \leq g \leq 100$
- $1 \leq n \leq 10^5$
- $1 \leq a_i \leq 10^9$
- The sum of  $n$  over all games does not exceed  $10^5$ .

### Sample Input 0

```
2
5
5 2 6 3 4
2
3 1
```

### Sample Output 0

```
ANDY
BOB
```

### Explanation 0

Andy and Bob play the following two games:

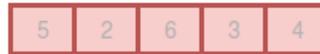
1. Initially, the array looks like this:



In the first move, Bob removes **6** and all the elements to its right, resulting in  $A = [5, 2]$ :



In the second move, Andy removes **5** and all the elements to its right, resulting in  $A = []$ :



At this point, the array is empty and Bob cannot make any more moves. This means Andy wins, so we print **ANDY** on a new line.

2. In the first move, Bob removes **3** and all the elements to its right, resulting in  $A = []$ . As there are no elements left in the array for Andy to make a move, Bob wins and we print **BOB** on a new line.

### Sample Input 1

```
2
5
1 3 5 7 9
5
7 4 6 5 9
```

### Sample Output 1

BOB  
ANDY

### Explanation 1

In the first test, they alternate choosing the rightmost element until the end. Bob, Andy, Bob, Andy, Bob.

In the second case, Bob takes **9**, Andy takes **[7, 4, 6, 5]**.