

# Gaming Array



Andy loves playing games. He wants to play a game with his little brother, Bob, using an array,  $A$ , of  $n$  distinct integers. The rules are as follows:

- Bob always plays first and the two players move in alternating turns.
- In a single move, a player chooses the maximum element currently present in the array and removes it as well as all the other elements to its right. For example, if  $A = [2, 3, 5, 4, 1]$ , then it becomes  $A = [2, 3]$  after the first move because we remove the maximum element (i.e., 5) and all elements to its right (i.e., 4 and 1).
- The modifications made to the array during each turn are permanent, so the next player continues the game with the remaining array. The first player who is unable to make a move loses the game.

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

## Input Format

The first line contains a single integer denoting  $g$  (the number of games). The  $2 \cdot g$  subsequent lines describe each game array over two lines:

1. The first line contains a single integer,  $n$ , denoting the number of elements in  $A$ .
2. The second line contains  $n$  distinct space-separated integers describing the respective values of  $a_0, a_1, \dots, a_{n-1}$  for array  $A$ .

## Constraints

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

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

- $1 \leq g \leq 10$
- $1 \leq n \leq 1000$
- $1 \leq a_i \leq 10^5$
- 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  **$10^5$** .

## Output Format

For each game, print the name of the winner on a new line (i.e., either **BOB** or **ANDY**).

## 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:

- Initially, the array looks like this:

5	2	6	3	4
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In the first move, Bob removes **6** and all the elements to its right, resulting in  $A = [5, 2]$ :

5	2	6	3	4
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In the second move, Andy removes **5** and all the elements to its right, resulting in  $A = []$ :

5	2	6	3	4
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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.

- 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.