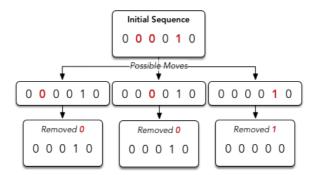
# **Zero-One Game**



Alice and Bob are playing the following game:

- The game starts with a sequence of zeroes and ones.
- Alice and Bob take alternating turns, and Alice always moves first.
- During each turn, a player removes *one* element from the sequence that satisfies the following:
  - It is not the first or last element.
  - It must be surrounded by zeroes on both sides.
- The first player who can't take their turn loses the game.
- Both players always move optimally.

For example, the diagram below depicts the three possible first moves for the sequence  $\{0,0,0,0,1,0\}$ :



Alice and Bob play g games. Given the initial sequence of numbers for each game, print the name of each game's winner on a new line (i.e., Alice or Bob).

### **Input Format**

The first line contains an integer, g, denoting the number of games. The subsequent lines describe each game in the following format:

- 1. The first line contains a single integer denoting n (the length of the sequence).
- 2. The second line contains n space-separated integers denoting the respective values of the initial sequence. Each element is either zero or one.

# Constraints

- $1 \le q \le 10^4$
- $1 \le n \le 10^5$
- ullet The sum of n over all games doesn't exceed  $10^6$ .

#### **Output Format**

For each game, print the name of the winner on a new line (i.e. Alice or Bob).

#### Sample Input 0

```
3
4
1001
5
10101
6
000000
```

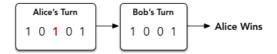
## **Sample Output 0**

```
Bob
Alice
Bob
```

## **Explanation 0**

Alice and Bob play the following g=3 games:

- 1. No element in  $\{1,0,0,1\}$  is surrounded by zeroes on both sides, so Alice cannot make her first move. Because Bob wins by default, we print Bob on a new line.
- 2. Alice removes one element from  $\{1,0,1,0,1\}$  and Bob is left with no moves:



Thus, we print Alice on a new line.

3. Each player removes some zero from  $\{0,0,0,0,0,0\}$  until only the two zeroes at either end remain (because all elements are zero, the choice of element to remove is arbitrary), at which point Alice is left with no moves:



Thus, we print **Bob** on a new line.