Alice and Bob

Alice and Bob are interested in playing games. One day, they invent a game which has rules below:

1. Firstly, Alice and Bob choose some random positive integers, and here we describe them as .
2. Then they begin to write numbers alternately. At the first step, Alice has to write a “0”, here we let ; Then, at the second step, Bob has to write a number which satisfies the condition that ; From the third step, the person who has to write a number in this step must write a number which satisfies the condition that at the same time.
3. The person who can’t write a legal number at his own step firstly lose the game.

Here’s the question, please tell me who will win the game if both Alice and Bob play the game optimally.

Input:

At the beginning, an integer T indicating the total number of test cases.

Every test case begins with two integers n and m, which are described before. And on the next line are m positive integers .

Output:

For every test case, print “Case #k: ” firstly, where k indicates the index of the test case and begins from 1. Then if Alice will win the game, print “Alice”, otherwise “Bob”.

Sample Input:

2

7 1

3

7 2

2 6

Sample Output:

Case #1: Alice

Case #2: Bob

Author: standy from UESTC