Problem J. Knight Game

- Time Limit: 2 sec

Problem Statement

The rule of this game is given as follows.

- There is a knight and a chessboard with H rows and W columns. The square at the i-th row from the top and the j-th column from the left is called square (i, j). Initially, the knight is placed on square (x, y).
- Alice and Bob alternately take the following action, starting with Alice.
- Move the knight onto one of the unvisited squares according to the knight's movement.
- Knights can move from (x_1, y_1) to (x_2, y_2) if and only if $(x_1 - x_2)^2 + (y_1 - y_2)^2$ is 5.
- The player who cannot move the knight is the loser.

When both players have done their best, determine whether Alice or Bob will win. Answer for T test cases.

The unvisited square is defined as follows.

- A square on the board that the knight has never visited since the beginning of the game.

Input

$$T$$
$$\text{case}_1$$
$$\vdots$$
$$\text{case}_T$$

case_i represents the i-th test case.

Each test case is given in the following format.

$$H \ W \ x \ y$$

The input satisfies the following constraints.

- All inputs consist of integers.
- $1 \le T \le 2 \times 10^5$
- $1 \le H, W \le 10^9$
- $1 \le x \le H$
- $1 \le y \le W$

Output

Output T lines. On the line i, answer the winner of the i-th test case, Alice or Bob.

Sample Input	Sample Output
2 4 4 1 1 9 17 7 3	Alice Bob