



A. Blackboard Game

time limit per test: 1 second
 memory limit per test: 256 megabytes

Initially, the integers from 0 to $n - 1$ are written on a blackboard.

In one round,

- Alice chooses an integer a on the blackboard and erases it;
- then Bob chooses an integer b on the blackboard such that $a + b \equiv 3 \pmod{4}$ and erases it.

Rounds take place in succession until a player is unable to make a move — the first player who is unable to make a move loses. Determine who wins with optimal play.

*We define that $x \equiv y \pmod{m}$ whenever $x - y$ is an integer multiple of m .

Input

The first line contains an integer t ($1 \leq t \leq 100$) — the number of test cases.

The only line of each test case contains an integer n ($1 \leq n \leq 100$) — the number of integers written on the blackboard.

Output

For each test case, output on a single line "Alice" if Alice wins with optimal play, and "Bob" if Bob wins with optimal play.

You can output the answer in any case (upper or lower). For example, the strings "aLiCe", "alice", "ALICE", and "aLiCe" will be recognized as "Alice".

Example

input	Copy
5	
2	
4	
5	
7	
100	
output	Copy
Alice	
Bob	
Alice	
Alice	
Bob	

Note

In the first sample, suppose Alice chooses 0, then Bob cannot choose any number so Alice wins immediately.

In the second sample, suppose Alice chooses 0, then Bob can choose 3. Then suppose Alice chooses 2, then Bob can choose 1. Then Alice has no numbers remaining, so Bob wins.

Codeforces Round 1034 (Div. 3)

Contest is running

02:04:37

Out of competition



→ Submit?

Language: GNU G++23 14.2 (64 bit, ms) ▼

Choose file: No file chosen

→ Last submissions

Submission	Time	Verdict
326825776	Jul/01/2025 17:44	Accepted

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