

Alice and Bob's Silly Game



Alice and Bob invented the following silly game:

- The game starts with an integer, n , that's used to build a *set* of n distinct integers in the inclusive range from 1 to n (i.e., $set = \{1, 2, 3, \dots, n-1, n\}$).
- Alice always plays first, and the two players move in alternating turns.
- During each move, the current player chooses a **prime number**, p , from *set*. The player then removes p and all of its multiples from *set*.
- The first player to be unable to make a move loses the game.

Alice and Bob play g games. Given the value of n for each game, print the name of the game's winner on a new line. If Alice wins, print **Alice**; otherwise, print **Bob**.

Note: Each player always plays optimally, meaning they will not make a move that causes them to lose the game if some better, winning move exists.

Input Format

The first line contains an integer, g , denoting the number of games Alice and Bob play. Each line i of the g subsequent lines contains a single integer, n , describing a game.

Constraints

- $1 \leq g \leq 1000$
- $1 \leq n \leq 10^5$

Subtasks

- $1 \leq n \leq 1000$ for 50% of the maximum score

Output Format

For each game, print the name of the winner on a new line. If Alice wins, print **Alice**; otherwise, print **Bob**.

Sample Input 0

```
3
1
2
5
```

Sample Output 0

```
Bob
Alice
Alice
```

Explanation 0

Alice and Bob play the following $g = 3$ games:

1. We are given $n = 1$, so $set = \{1\}$. Because Alice has no valid moves (there are no prime numbers in the set), she loses the game. Thus, we print **Bob** on a new line.

2. We are given $n = 2$, so $set = \{1, 2\}$. Alice chooses the prime number $p = 2$ and deletes it from the set, which becomes $set = \{1\}$. Because Bob has no valid moves (there are no prime numbers in the set), he loses the game. Thus, we print **Alice** on a new line.
3. We are given $n = 5$, so $set = \{1, 2, 3, 4, 5\}$. Alice chooses the prime number $p = 2$ and deletes the numbers **2** and **4** from the set, which becomes $set = \{1, 3, 5\}$. Now there are two primes left, **3** and **5**. Bob can remove either prime from the set, and then Alice can remove the remaining prime. Because Bob is left without a final move, Alice will always win. Thus, we print **Alice** on a new line.