Description

Alice and Bob play a simple game. There is a stack initially consisting of n coins and they alternate turns. Each turn consists of removing exactly one or two coins from the stack. The person who takes the last coin is the winner.

Alice plays first.

Assuming both players play optimally, who will win the game?

Note, we won't ask such difficult problems in the first week or so of morning problems, but it is still good practice.

Input

The input consists of a single line containing a single positive integer $n \leq 10^9$.

Output

Output consists of a single line containing the phrase **Alice wins** or **Bob wins**, depending on who will win if both players play optimally.

Sample Input 1

1

Sample Output 1

Alice wins

Explanation: Alice wins because she can simply take the only coin on her first play.

Sample Input 2

3

Sample Output 2

Bob wins

Explanation: Whether Alice takes 1 or 2 coins on her first turn, Bob can take the rest.

Sample Input 3

5

Sample Output 3

Alice wins

Explanation: Alice wins by taking 2 coins initially, then mimicking Bob's strategy describe above for sample input #2.