You can't win

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

Recently, people have been wondering how the world will be if the population was reduced to half. The government announced a law that allows people to kill each other but under some certain rules to keep them under control. The rules state that the battle must be in a certain area of the country between two people fully isolated from the outside world. Each of them enters the battle with health equal to N and an imaginary weapon, and they take turns. In one turn, the current player can do one of those things with his imaginary weapon:

1. Increase his health by k points.
2. Decrease his opponent's health by k points.

Before that, there is a value called "*die*". Each player has his own *die* value which is initially 0. Before each turn, the *die* value increases by 1 for the current player and then his health gets reduced by it before he plays. When the player's health is less than or equal to 0, he loses immediately and the other player wins.

The players' names are "*bizarre*"and "*baba*". *bizarre* is the one who goes first because he is the oldest. You are the judge of this battle and people trust you to tell them who will win this battle if each player plays optimally. Can you tell them who will win?

Input

The only line of input contains two integers N, k ($1 \leq N, k \leq 10^9$).

Output

You should output "*bizarre*"if he's going to win or "*baba*"otherwise.

Example

standard input	standard output
4 3	bizarre

Note

Let's see why *bizarre* is the winner of this battle:

1. The *die* value for *bizarre* is 0 and it will increase by 1 because it is his turn. Then, his *die* value will be deducted from his health, leaving 3 health points for *bizarre*.
2. *bizarre* will use his weapon to decrease his opponent's health by k, leaving 1 health point for *baba*.
3. It's *baba* turn now. His *die* value is 0 and it will increase by 1. Then, his *die* value will be deducted from his health, leaving 0 health points for *baba*. So, he will immediately lose before making any further move and *bizarre* will win.