Time Limit: 1.5 s Memory Limit: 256M

Aro and Deuo are best friends. Deuo gifts Aro a wave drawing of width $\mathbf{N}$. But since the drawing is not painted yet, Aro and Deuo decide to paint the drawing together.

They make up a game out of painting the drawing in turns. With each turn, the player paints a section with a width of $\mathbf{K}$ that's not yet painted. Painters cannot repaint the already painted sections. The last one to paint the drawing wins the game, and the game starts with Aro as the first player.

Considering that each player behaves optimally, who will win the Wave Painting game?
Note: In the end, there can be unpainted areas in the drawing.

## Input

The first line contains two integers, the width of the painting, $\mathbf{N}$, and the width of the section that should be painted, $\mathbf{K}$.

- $2 \leq \mathbf{K} \leq \mathbf{N} \leq 2000$


## Output

Print the name of the winner, Aro or Deuo.

## Examples

Input 1:

## 42

## Output 1:

## Aro

## Input 2:

```
8 3
```

Output 2:

Deuo

## Explanation

 for Deuo to paint with a width of 2 .

Input 2: No matter what Aro does in the first turn, Deuo can paint a section of width 3. But after Deuo's turn, there will not be any section of width 3 for Aro to paint. Two example situations can be shown as follows:

- 11100000 -> 111111100
- 00111000 -> 001111111

