

E. Card Game

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

Rohu and Ishu are playing a card game. They have a deck of n cards, each with some value. In each round of the game, they perform the following steps:

1. They draw K cards from the top of the deck.
2. They note the highest value among the drawn cards.
3. They remove the first card from the drawn set.
4. Steps 1-3 are repeated until there are fewer than K cards left in the deck.

Once the game has ended, the winner is determined as follows-

The total score for the Player is calculated as the sum of the highest values noted by him during the game.

The player with the highest total score is declared the winner. If both players have the same total score, the game is declared a draw.

Note: The game Always starts with Ishu

Input

The first line of input consists of two integers n and k where n is The number of cards in the deck ($1 \leq n \leq 10^5$) and K is The number of cards drawn in each round ($1 \leq K \leq n$) and the second line contains n space-separated numbers $a_1, a_2, ..., a_n$, where a_i is the value of the i -th card in the deck ($1 \leq a_i \leq 10^9$)

Output

Print "Rohu" if Rohu wins, "Ishu" if Ishu wins, or "draw" if the scores are equal.

Examples

input	Copy
6 3 4 6 2 8 1 7	
output	Copy
rohu	

input	Copy
10 2 3 7 1 9 4 8 2 6 5 10	
output	Copy
ishu	

input	Copy
6 3 2 6 3 1 9 7	
output	Copy
draw	

Note

In Testcase 1:

There are 6 cards in the deck and 3 cards are drawn in each round. The values of the cards in the deck are [4, 6, 2, 8, 1, 7].

Ishu draws the first 3 cards: [4, 6, 2]. The highest value is 6. Ishu removes the first card from the drawn set: [4, 6, 2].

Rohu draws the next 3 cards: [6, 2, 8, 1, 7]. The highest value is 8. Rohu removes the first card from the drawn set: [6, 2, 8].

Ishu draws the next 3 cards: [2, 8, 1, 7]. The highest value is 8. Ishu removes the first card from the drawn set: [2, 8, 1].

Rohu draws the first 3 cards: [8, 1, 7]. The highest value is 8. Rohu removes the first card from the drawn set: [8, 1, 7].

The game ends because there are only 2 cards left in the deck.

Score calculation:

Ishu's score: $6 + 8 = 14$

Rohu's score: $8 + 8 = 16$

Since Rohu's score is higher than Ishu's score, the winner is Rohu. Therefore, the output is "Rohu".