L1 - Which way

You are trapped in Jabba's Palace. You have a coded map that describes the way out from your current location. The map contains a sequence of positive integers. Each integer corresponds to one of three directions (left, straight, right). To determine the direction you must convert the number into binary (base two with no leading 0s). If the binary number has more 0's than 1's go left. If the binary number has the same number of 0's and 1's go straight, and if it has more 1's than 0's go right. Your job is to read the sequence of positive integers and print the directions to find your way out.

Here are three example of converting positive (decimal) integers into binary and then into a direction:

Decimal	Binary	Direction
17	10001	left
9	1001	straight
22	10110	right

Input

The input is only a positive integer.

Output

Output the correct direction (left, straight, right) for escaping the Jabba's Palace.

Example

Input:	Output:
17	left
Input:	Output:
7	right
Input:	Output:
4	left
Input:	Output:
9	straight
Input:	Output:
22	right