

A sequence of $n > 0$ integers is called a *jolly jumper* if the absolute values of the difference between successive elements take on all the values 1 through $n - 1$. For instance,

1 4 2 3

is a jolly jumper, because the absolute differences are 3, 2, and 1 respectively. The definition implies that any sequence of a single integer is a jolly jumper. You are to write a program to determine whether or not each of a number of sequences is a jolly jumper.

Input

Each line of input contains an integer $n \leq 3000$ followed by n integers representing the sequence.

Output

For each line of input, generate a line of output saying 'Jolly' or 'Not jolly'.

Sample Input

4 1 4 2 3
5 1 4 2 -1 6

Sample Output

Jolly
Not jolly