Assignment 4: Jolly Jumpers

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Jolly Jumpers

Description

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

1 4 2 3

Rules

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. Write a program to determine whether each of a number of sequences is a jolly jumper.

Input

Each line of input contains an integer n < 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

Restrictions

- $\bullet\,$ Your solution must be written in java.
- \bullet Your solution must be uploaded to github.