Problem E: Jolly Jumpers

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 absolutes 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 $n \le 3000$ 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