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,

\[ 1 \ 4 \ 2 \ 3 \]

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 \( n < 3,000 \) 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

\[
\begin{array}{l}
4 \ 1 \ 4 \ 2 \ 3 \\
5 \ 1 \ 4 \ 2 \ -1 \ 6 \\
\end{array}
\]

Sample Output

Jolly
Not jolly

<table>
<thead>
<tr>
<th>input</th>
<th>output</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 1 4 2 3</td>
<td></td>
</tr>
<tr>
<td>5 1 4 2 -1 6</td>
<td></td>
</tr>
</tbody>
</table>

kwangmin@kwangmin-Ubuntu:~/TA/lab2$ ./a.out < input1.txt
Jolly
kwangmin@kwangmin-Ubuntu:~/TA/lab2$ 

kwangmin@kwangmin-Ubuntu:~/TA/lab2$ ./a.out < input2.txt
Not jolly
kwangmin@kwangmin-Ubuntu:~/TA/lab2$ 