

Full or Not

Definition: A sequence of $n > 0$ integers is called **full**, 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 full sequence, because the absolute differences are 3, 2, and 1, respectively. Write a program to determine whether each of a number of sequences is full. You do not know beforehand how many lines of input there will be.

Input

Each line of input contains an integer n (can be any “reasonable” value), followed by n integers representing the sequence.

Output

For each line of input generate a line of output saying `Full` or `Not Full`.

Sample Input

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

Sample Output

```
Full
Not Full
```