Problem WASHING: Washing The Dishes

The little Hans has just moved from Nürnberg to a WG (flat share) in Erlangen, where he studies Computer Science. Moving out of your parents house brings a lot of fun, but, as life goes, also a lot of new work.

Today, the Hans is washing the dishes. Unfortunately, this has not been done for 3 months, and there are only three places left in the kitchen for the dishes:

- they can be in the sink, where they all actually are at the beginning

- they can be at the one spot on the table not covered by pizza, empty beer bottles or other relicts of the fun the Hans and his friends had the last days

- they can be in the cupboard, where they eventually *should* be.

But, look, the sink, the table and the cupboard are all so crowded that no two dishes can be put side by side on any of these three places: the Hans has to stack them! Doing this, he has to follow these constraints:

- since the kitchen is very crowded, the Hans can only take the top most dish of a stack, and he can only stack a dish on the top of a stack

- a cleaned dish on the table must not be put back to the sink, and a dish already in the cupboard must not be put back at all.

- dishes in the cupboard must be stacked according to their size, i.e. Hans may stack a dish into the cupboard if and only if it is not bigger than the top of the stack in the cupboard

- when Hans has cleaned a dish in the sink, he can stack it on the table or directly in the cupboard

- in the end, all dished must be in the cupboard, stacked according to their size.

Please note that the kitchen is so crowded that Hans can place dishes only at the top of a stack and take dishes only from the top of a stack. But, to be fair, Hans can stack a dish on the table also if it is bigger than the top most. You will perhaps have figuered out that Hans' task is not always possible. Your problem is, given the size of the dishes in the sink in the beginning, to determine if the Hans can fulfill his work. If not, you should tell him that he can go back to his computer instead of wasting his time.

Input

The first line of the input contains a single integer c, the number of test cases following. Each test case consists of a single line of the form $na_1a_2...a_n$, where n is the number of dishes in the sink, and a_i is the size of the ith dish, numbered from the bottom of the sink to the top. You may assume that no two dishes have the same size.

Output

For each test case, if the Hans can fulfill his task, print `Go on, Hans!`, else print `Go back to your Computer, Hans!`

Sample Input 1

```
2
3 2 1 3
3 3 1 2
```

Sample Output 1

```
Go on, Hans!
Go back to your computer, Hans!
```