## IIUPC 2012 <br> Problem J: Yell Classico

The Old Yellers, the contestants of the old days of IIUC are going to have a football match with the current contestants. As the yellers are going to be the host of the match, it will be called 'Yell Classico'. As the yellers are always busy in yelling, oops, I mean programming, they have appointed you as the manager of their team. Now, as a manager of the Yeller team, you have to select $\mathbf{1 1}$ players for the match from $\mathbf{N}$ players.

All the $\mathbf{N}$ players will stand in a line just before the match. Your task will be to select $\mathbf{1 1}$ players from them in such a way that, the player standing in front is as tall as possible. If there are more than one such team formations, do it in a way where the $2^{\text {nd }}$ player is as tall as possible. If still there is a tie, choose the formation having tallest player in the $3{ }^{\text {rd }}$ position and so on. (Which means, until you can break the tie or reach the $11^{\text {th }}$ position, keep looking in the next position).

Note that,

1. You don't have enough time to change the order in which players are standing.
2. If you have tie even after reaching the $11^{\text {th }}$ position, select from any of the tied formations.

Players are quite same in their playing abilities, you don't need to bother about that.

## Input

First line of input will contain the number of test cases, $\mathbf{T} \leq \mathbf{1 0 0}$.
For each test case, there are two lines.
The first line contain $\mathbf{N}$ (number of players, $\mathbf{1} \leq \mathbf{N} \leq \mathbf{2 0 0 0}$ ).
The second one is a line of $\mathbf{N}$ integers separated by spaces. The ith integer of this line will specify the height of the ith player. (Heights will not be greater than $\mathbf{1 0}^{\mathbf{9}}$ ).

## Output

For each test case output "Case $\mathbf{X}$ : ", ( $\mathbf{X}$ is the case number, starting from $\mathbf{1}$ ). Then print the heights of the $\mathbf{1 1}$ selected players separated by spaces. If it's not possible to select exactly $\mathbf{1 1}$ players, then send the spectators home by printing "go home!" (Without quotations). See the sample output for exact formatting.

| Sample Input | Output for Sample Input |
| :---: | :---: |
| 4 | Case 1: 108993566228 |
| 15 | Case 2: 26387253433 |
|  | Case 3: go home! |
| 11 | Case 4: 638725343310 |
| $\begin{array}{lllllllllll} 2 & 6 & 3 & 8 & 7 & 2 & 5 & 3 & 4 & 3 & 3 \end{array}$ |  |
| 2796 |  |
| 12 |  |
| 6238725343310 |  |
| Problem Setter: Bidhan Roy |  |
| Alternate Solution: Hasnain Heickal Jami |  |

## Output Explanation

In the last test case, there are $\mathbf{1 2}$ ways you can choose the team.

1. 238725343510
2. 638725343510
3. 628725343510
4. 623725343510
5. 623825343510
6. 623875343510
7. 623872343510
8. 623872543510
9. 623872533510
10. 623872534510
11. 623872534310
12. 62387253435

From them, you can not select the $\mathbf{1}^{\text {st }}$ team-formation because it has a player with height $\mathbf{2}$ in front, but other formations have a taller player of height $\mathbf{6}$ in front.

Now, there is a tie, because, all the other formations have a player of same height (6) in front. So, now you will have to look for the formation which has the tallest player in next $\left(\mathbf{2}^{\text {nd }}\right)$ position. For this case, it is the second one (having a player of height $\mathbf{3}$ ) and there is no tie for this position. So, the team-formation you will select is 638725343510 .

