

Reward for the hard work

You have successfully decrypted the exam paper and the miracle has happened! Owing to your generous nature, you decide to share this paper with your batch-mates. Just giving away the paper to everyone would belittle the pains you took to get it. So, you devise a strategy to earn reward for your hard work. You decide to meet your batch-mates by dividing them into separate groups of several different sizes. For each group, you give away the paper to the person who bids the highest amount.

Input

The first line of the input contains an integer g , the number of groups. After this, g lines follow. Each line starts with a single integer N , the number of batch-mates in the group followed by a space and then N space-separated integers b_i , corresponding to the bids made by each of them.

Output

For each group, output one line containing "Group #x: a", where x is the group number (starting from 1), and a is the highest bid value.

Example

Input:

```
3
3 1 3 2
2 3 5
5 10 0 50 5 20
```

Output:

```
Group #1: 3
Group #2: 5
Group #3: 50
```

Limits:

```
1 <= g <= 10^3,
1 <= N <= 100,
0 <= b_i <= 10^9.
```