

Small Boys and The Prinicipal

There were small school boys who were bunking their classes. The principal caught all those boys and now, they have to arrange themselves according to their heights as the principal was strict.(To align themselves according to their heights in increasing order was something which was taught)

But, all the boys know the number of boys who are smaller than him. Can you give the principal the order of their positions? :)

Input

First Line contains an integer 'T', the number of test cases. The first line of each test case indicates the number of boys 'X'.

In the next line there are 'X' spaced integers. The i'th integer signifies the number of boys which have height less than i.

Input Constraints:

$$1 \leq t \leq 1000$$

$$0 \leq X \leq 1000$$

Output

For every test case, output the formation of the boys in a seperate line [the i'th integer is the rank of the boy(in terms of height) that comes i'th in the height formation]

Example

Input:

```
4
6
0 1 2 3 4 5
5
0 0 0 0 0
5
0 1 1 1 4
4
0 0 1 3
```

Output:

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