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Alice and Books





? Ask Doubt

 Time-Limit: 10 sec

 Score: 0/100

Difficulty : 

 Memory: 256 MB

 Accepted Submissions: 100

Relevant For:

AZ-201

AZ-202

AZ-301

Description

Alice read N books. The i -th book has A_i pages. After every book Alice reads, you have to tell the largest integer B such that Alice has read B books that have at least B pages.

Input Format

The first line of the input contains one integer T - the number of test cases. Then T test cases follow.
The first line of each test case contains one integer N - the length of the array.
The second line of each test case contains N space-separated integers.

Output Format

For each test case, print N integers, A_1, A_2, \dots, A_N , where A_i is the largest integer B such that Alice has read B books that have at least B pages after reading the i -th book.

Constraints

$1 \leq T \leq 100$
 $1 \leq N \leq 10^5$
 $1 \leq A_i \leq 10^5$

Sample Input 1

Copy

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

Sample Output 1

Copy

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

C++14[GCC] ▾



1

Submit