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Problem F Order

We have a sequence of n integers $S = (s_1, s_2, \dots, s_n)$, where $s_i \neq s_j$ and $1 \leq s_i \leq n$. Using S , we newly define another sequence $R = (r_1, r_2, \dots, r_n)$, where r_i is defined as the number of integers which are smaller than s_i among the integers in $\{s_1, s_2, \dots, s_{i-2}, s_{i-1}\}$.

Let us show one example for $n = 10$. Assume that $S = (6, 4, 3, 5, 1, 2, 7, 8, 9, 10)$, then R should be $R = (0, 0, 0, 2, 0, 1, 6, 7, 8, 9)$. When you are given a sequence R , write a program which reconstructs the original sequence S . In some cases it is impossible to reconstruct S from R . For example, if $n = 5$ and $R = (0, 2, 2, 0, 1)$, then we know that it is impossible to reconstruct S from it.

Input

Your program is to read from standard input. The input consists of T test cases. The number of test cases T is given in the first line of the input. Each test case starts with an integer n ($1 \leq n \leq 100$), the number of integers in S . Then a sequence R of n integers is given in the next line.

Output

Your program is to write to standard output. For each sequence R , your program should find the corresponding sequence S from R and print it in each line. If you cannot reconstruct S from R , then your program should print "IMPOSSIBLE".

The following shows sample input and output for three test cases.

Sample Input	Output for the Sample Input
3	6 4 3 5 1 2 8 9 7 10
10	10 9 8 7 6 5 4 3 2 1
0 0 0 2 0 1 6 7 6 9	IMPOSSIBLE
10	
0 0 0 0 0 0 0 0 0 0	
12	
0 3 4 5 0 1 2 3 4 5 6 7	