Problem D: Counting

Description

Given a sequence of integers, count how many times each number appears in the sequence.

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 input. On the first line of each test case, the number of integers in the sequence N is given ($1 \le N \le 20$). On the second line of each test case, the values of k of the N inputs are given, each k separated by a space ($0 \le k \le 9$).

Output

Your program is to write to standard output. For each test case you should print a sequence of numbers, where each number denotes the frequency of each number in the order of 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, each separated by a space.

Sample

Input	Output
2 3 1 1 1 5 9 3 8 3 3	0 3 0 0 0 0 0 0 0 0 0 0 0 3 0 0 0 0 1 1