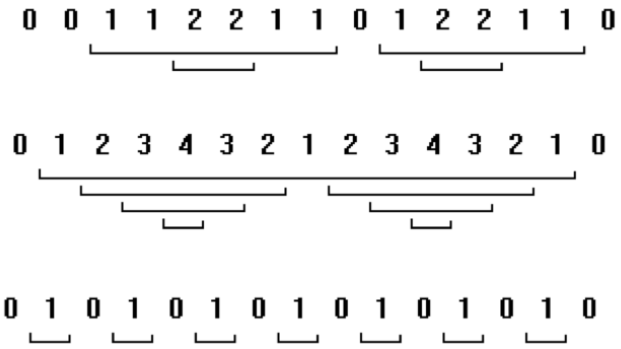
G. Islands in the Data Stream

Source file: **islands.{c, java, cpp}**

Input file: **{stdin, System.in, cin}**

Output: **{stdout, System.out, cout}**

Given a sequence of integers **a1**, **a2**, **a3**, **...**, **an**, an *island* in the sequence is a contiguous subsequence for which each element is greater than the elements immediately before and after the subsequence. In the examples below, each island in the sequence has a bracket below it. The bracket for an island contained within another island is below the bracket of the containing island.



Write a program that takes as input a sequence of **15** non-negative integers, in which each integer differs from the previous by at most **1**, and outputs the number of islands in the sequence.

Input

The first line of input contains a single integer **P**, (**1 ≤ P ≤ 1000**), which is the number of data sets that follow. Each data set should be processed identically and independently.

Each data set consists of a single line of input. It contains the data set number, **K**, followed by **15** non-negative integers separated by a single space. The first and last integers in the sequence will be **0**. Each integer will differ from the previous integer by at most **1**.

Output

For each data set there is one line of output. The single output line consists of the data set number, **K**, followed by a single space followed by the number of islands in the sequence.

Sample Input	Sample Output
4 1 0 0 1 1 2 2 1 1 0 1 2 2 1 1 0 2 0 1 2 3 4 3 2 1 2 3 4 3 2 1 0 3 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 4 0 1 2 3 4 5 6 7 6 5 4 3 2 1 0	1 4 2 7 3 7 4 7