Math assignment

Ameen is a student at primary school, his teacher gave him a mathematical assignment. He asked Ameen to write N decreasing integers. He told Ameen that his score will be equal to the length of the longest consecutive sequence of decreasing numbers in his assignment. for example: if Ameen wrote 5 1 3 2 1 5 4 the teacher will give him 3 points for "3 2 1". Ameen wrote the numbers but he asked you to determine his score.

Input

Your program will be tested on one or more test cases. The first line of input will be a single integer T, the number of test cases (1<=T<=10). Each test case starts with N (1<=N<=1000) followed by N integers.

Output

For each test case, print "Case_#i:_X" where "X" is Ameen's score, "i" is the number of the test case (starting with 1) and "_" is a white space. Each output should be printed in a separate line.

Example

Input:

4 4 3 2 1

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5

Output:

Case #1: 4

Case #2: 3

Case #3: 1