DUO

Bibi work at an store. The store want sell a pair of product with discount. The pair of product must be have the same code. Bibi ask you to count pair of product. Bibi give you code of N products with **ordered by ascending** (small to bigger).

Format Input

The first line contains an integer T stating the number of test cases. For each test case, the first line contains a single integer N which indicate the number of products. The next line contains N integers X_i $(1 \leq i \leq N)$ which indicate i^{th} element in the array.

Format Output

Consists of T lines where each line has the format "Case #X: Y", where X is the test case number starting at 1 and Y is the count of pair product.

Constrains

$1 \leq T \leq 100$

$1 \leq N \leq 10^5$

$1 \leq X_i \leq 2 \times 10^9$

Sample

Input	Output
3	Case #1: 0
10	Case #2: 3
1 2 3 4 5 6 7 8 9 10	Case #3: 9
10	
2 2 3 3 3 5 9 10 10 10	
20	
2 2 3 4 4 4 4 5 5 5 6 6 7 7 8 8 9 9 10 10	

Explaination Case 3:

Sets: (2, 2), 3, (4, 4), (4, 4), (5, 5), 5, (7, 7), (8, 8), (9, 9), (10, 10)