1024 - Eid

In a strange planet there are \mathbf{n} races. They are completely different as well as their food habits. Each race has a food-eating period. That means the \mathbf{i}^{th} race eats after every \mathbf{x}_i de-sec (de-sec is the unit they use for counting time and it is used for both singular and plural). And at that particular de-sec they pass the whole day eating.

The planet declared the de-sec as 'Eid' in which all the races eat together.

Now given the eating period for every race you have to find the number of de-sec between two consecutive Eids.

Input

Input starts with an integer T (\leq 225), denoting the number of test cases.

Each case of input will contain an integer n ($2 \le n \le 1000$) in a single line. The next line will contain n integers separated by spaces. The i^{th} integer of this line will denote the eating period for the i^{th} race. These integers will be between 1 and 10000.

Output

For each case of input you should print a line containing the case number and the number of de-sec between two consecutive Eids. Check the sample input and output for more details. The result can be big. So, use big integer calculations.

Sample Input	Output for Sample Input
2	Case 1: 20
3	Case 2: 60
2 20 10	
4	
5 6 30 60	